

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: December 30, 2005, 18:55:16 ; Search time 190 Seconds
(without alignments)
55.182 Million cell updates/sec

Title: US-09-914-454B-1

Perfect score: 20

Sequence: 1 tccatgacgttctcgacgtt 20

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 4172979 seqs, 262114271 residues

Total number of hits satisfying chosen parameters: 8345958

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications NA New.*
1: /cgn2_6/prodata/1/pubpna/US08_NEW_PUB.seq.*
2: /cgn2_6/prodata/1/pubpna/US06_NEW_PUB.seq.*
3: /cgn2_6/prodata/1/pubpna/US07_NEW_PUB.seq.*
4: /cgn2_6/prodata/1/pubpna/PCT_NEW_PUB.seq.*
5: /cgn2_6/prodata/1/pubpna/US09_NEW_PUB.seq.*
6: /cgn2_6/prodata/1/pubpna/US10_NEW_PUB.seq.*
7: /cgn2_6/prodata/1/pubpna/US11_NEW_PUB.seq.*
8: /cgn2_6/prodata/1/pubpna/US11_NEW_PUB.seq2.*
9: /cgn2_6/prodata/1/pubpna/US11_NEW_PUB.seq3.*
10: /cgn2_6/prodata/1/pubpna/US60_NEW_PUB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	20	100.0	20	6	US-10-469-561-5
2	20	100.0	20	6	US-10-619-279-10
3	20	100.0	20	6	US-10-435-656-10
4	20	100.0	20	7	US-11-025-858-3
5	20	100.0	20	7	US-11-025-858-7
6	20	100.0	20	7	US-11-127-654-63
7	20	100.0	20	7	US-11-127-654-82
8	20	100.0	20	7	US-11-127-654-130
9	20	100.0	20	7	US-11-127-654-145
10	20	100.0	20	7	US-11-127-654-146
11	20	100.0	20	7	US-11-127-654-292
12	20	100.0	20	7	US-11-127-654-916
13	20	100.0	20	7	US-11-154-324-1
14	20	100.0	20	7	US-11-089-426-22
15	20	100.0	20	7	US-11-134-918-10
16	20	100.0	20	7	US-11-031-460-10
17	20	100.0	20	7	US-11-087-177-45
18	18.4	92.0	20	7	US-11-127-654-221
19	18.4	92.0	1191	6	US-10-750-185-47485
20	18	90.0	20	6	US-10-497-591A-37
21	18	90.0	20	6	US-10-497-591A-38
22	18	90.0	20	7	US-11-127-654-303
23	17	85.0	17	6	US-10-619-279-70

24	17	85.0	17	7	US-11-127-654-66	Sequence 66, Appl
25	16.8	84.0	20	6	US-10-497-591A-12	Sequence 12, Appl
26	16.8	84.0	20	6	US-10-469-561-9	Sequence 9, Appl
27	16.8	84.0	20	6	US-10-619-279-7	Sequence 7, Appl
28	16.8	84.0	20	6	US-10-619-279-73	Sequence 73, Appl
29	16.8	84.0	20	6	US-10-435-656-7	Sequence 7, Appl
30	16.8	84.0	20	6	US-10-435-656-35	Sequence 35, Appl
31	16.8	84.0	20	6	US-10-435-656-44	Sequence 44, Appl
32	16.8	84.0	20	6	US-10-435-656-54	Sequence 54, Appl
33	16.8	84.0	20	7	US-11-025-858-2	Sequence 2, Appl
34	16.8	84.0	20	7	US-11-025-858-6	Sequence 6, Appl
35	16.8	84.0	20	7	US-11-127-654-10	Sequence 10, Appl
36	16.8	84.0	20	7	US-11-127-654-11	Sequence 11, Appl
37	16.8	84.0	20	7	US-11-127-654-77	Sequence 77, Appl
38	16.8	84.0	20	7	US-11-127-654-215	Sequence 215, App
39	16.8	84.0	20	7	US-11-127-654-219	Sequence 219, App
40	16.8	84.0	20	7	US-11-127-654-224	Sequence 224, App
41	16.8	84.0	20	7	US-11-127-654-229	Sequence 229, App
42	16.8	84.0	20	7	US-11-127-654-268	Sequence 268, App
43	16.8	84.0	20	7	US-11-127-654-269	Sequence 269, App
44	16.8	84.0	20	7	US-11-127-654-731	Sequence 731, App
45	16.8	84.0	20	7	US-11-127-654-779	Sequence 779, App

ALIGNMENTS

RESULT 1
US-10-469-561-5
; Sequence 5, Application US/10469561
; Publication No. US20050260216A1
; GENERAL INFORMATION:
; APPLICANT: Claire Ashman
; APPLICANT: James Scott Crowe
; APPLICANT: Jonathan Henry Ellis
; APPLICANT: Alan Peter Lewis
; TITLE OF INVENTION: VACCINE
; FILE REFERENCE: PG435505W
; CURRENT APPLICATION NUMBER: US/10/469,561
; CURRENT FILING DATE: 2003-08-29
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 20
; TYPE: DNA
; ORGANISM: unknown
; FEATURE:
; OTHER INFORMATION: synthetic immunostimulatory oligonucleotide
US-10-469-561-5

Query Match 100.0%; Score 20; DB 6; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.27; 0; Gaps 0;
Matches 20; Conservative 0; Mismatches 0; Indels 0;

QY 1 TCCATGACGTTCTCGACGTT 20
DB 1 TCCATGACGTTCTCGACGTT 20

RESULT 2
US-10-619-279-10
; Sequence 10, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30

```

; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-10

Query Match      100.0%; Score 20; DB 6; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCCATGACGTTCCTGAGTT 20
Db      1 TCCATGACGTTCCTGAGTT 20

RESULT 3
US-10-435-656-10
; Sequence 10, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-10

Query Match      100.0%; Score 20; DB 6; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 TCCATGACGTTCCTGAGTT 20
Db      1 TCCATGACGTTCCTGAGTT 20

RESULT 4
US-11-025-858-3
; Sequence 3, Application US/11025858
; Publication No. US20050250723A1
; GENERAL INFORMATION:
; APPLICANT: Hoerr, Ingmar
; APPLICANT: Von Der Mulbe, Florian
; APPLICANT: Pascolo, Steve
; TITLE OF INVENTION: Immunostimulation by chemically modified RNA
; FILE REFERENCE: Curevac GmbH (2793-1-002)
; CURRENT APPLICATION NUMBER: US/11/025,858
; CURRENT FILING DATE: 2004-12-28

```

; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 63
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-63

Query Match 100.0%; Score 20; DB 7; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||
DB 1 TCCATGACGTTCTCTGACGTT 20

RESULT 7

US-11-127-654-82
; Sequence 82, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; PRIOR FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 82
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: modified base
; LOCATION: (8)..(8)
; OTHER INFORMATION: m5C
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (17)..(17)
; OTHER INFORMATION: m5C
US-11-127-654-82

Query Match 100.0%; Score 20; DB 7; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||
DB 1 TCCATGACGTTCTCTGACGTT 20

RESULT 8

US-11-127-654-130
; Sequence 130, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; PRIOR FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 130
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: modified base
; LOCATION: (8)..(8)
; OTHER INFORMATION: m5C
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (17)..(17)
; OTHER INFORMATION: m5C
US-11-127-654-82

; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 130
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-130

Query Match 100.0%; Score 20; DB 7; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||
DB 1 TCCATGACGTTCTCTGACGTT 20

RESULT 9

US-11-127-654-145
; Sequence 145, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; PRIOR FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 145
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-145

Query Match 100.0%; Score 20; DB 7; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||
DB 1 TCCATGACGTTCTCTGACGTT 20

RESULT 10

US-11-127-654-146
; Sequence 146, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; PRIOR FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 146
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-146

us-09-914-454b-1.rnpbn

Tue Jan 3 10:58:23 2006

```

; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 146
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-146

Query Match      100.0%; Score 20; DB 7; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCCTGACGTT 20
Db 1 TCCATGACGTTCCCTGACGTT 20

RESULT 11
US-11-127-654-292
; Sequence 292, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; FILE REFERENCE: C1039.70060US01
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 292
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-292

Query Match      100.0%; Score 20; DB 7; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCCTGACGTT 20
Db 1 TCCATGACGTTCCCTGACGTT 20

RESULT 12
US-11-127-654-916
; Sequence 916, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; FILE REFERENCE: C1039.70060US01
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 916
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-916

Query Match      100.0%; Score 20; DB 7; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCCTGACGTT 20
Db 1 TCCATGACGTTCCCTGACGTT 20

RESULT 13
US-11-154-324-1
; Sequence 1, Application US/11154324
; Publication No. US20050255124A1
; GENERAL INFORMATION:
; APPLICANT: HOUGHTON, Michael
; APPLICANT: COATES, Steve
; APPLICANT: O'HAGAN, Derek
; TITLE OF INVENTION: HCV ELIS2 VACCINE COMPOSITIONS
; FILE REFERENCE: 2302-17206
; CURRENT APPLICATION NUMBER: US/11/154,324
; CURRENT FILING DATE: 2005-06-16
; PRIOR APPLICATION NUMBER: US/10/187,257
; PRIOR FILING DATE: 2002-06-28
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: CpG oligonucleotide
US-11-154-324-1

Query Match      100.0%; Score 20; DB 7; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.27;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCCTGACGTT 20
Db 1 TCCATGACGTTCCCTGACGTT 20

RESULT 14
US-11-089-426-22
; Sequence 22, Application US/11089426
; Publication No. US20050261229A1
; GENERAL INFORMATION:
; APPLICANT: Gillies, Stephen D.
; APPLICANT: Lo, Kin-Ming
; APPLICANT: Wesolowski, John
; TITLE OF INVENTION: PC Fusion Proteins For Enhancing the Immunogenicity of
; FILE REFERENCE: LEX-007
; CURRENT APPLICATION NUMBER: US/11/089,426
; CURRENT FILING DATE: 2005-03-24
; PRIOR APPLICATION NUMBER: US/09/621,268
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/144,965
; PRIOR FILING DATE: 1999-07-21
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
; LENGTH: 20

```


us-09-914-454b-1.1.rnpbn

Tue Jan 3 10:58:23 2006

```

; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 221
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-221

Query Match          92.0%; Score 18.4; DB 7; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.8;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCCTGACGTT 20
    |||||
Db 1 TCCATGACGTTCCCTGCGGTT 20
    |||||

RESULT 19
US-10-750-185-47485/c
; Sequence 47485, Application US/10750185
; Publication No. US20050260603A1
; GENERAL INFORMATION:
; APPLICANT: MMI GENOMICS, INC.
; APPLICANT: DENISE, Sue K.
; APPLICANT: KERR, Richard
; APPLICANT: ROSENFELD, David
; APPLICANT: HOLM, Tom
; APPLICANT: BATES, Stephen
; APPLICANT: FANTIN, Dennis
; TITLE OF INVENTION: COMPOSITIONS FOR INFERRING BOVINE TRAITS
; FILE REFERENCE: MM1100-2
; CURRENT APPLICATION NUMBER: US/10/750,185
; CURRENT FILING DATE: 2003-12-31
; PRIOR APPLICATION NUMBER: US 60/437,482
; PRIOR FILING DATE: 2002-12-31
; NUMBER OF SEQ ID NOS: 64922
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 47485
; LENGTH: 1191
; TYPE: DNA
; ORGANISM: Bovine 19866881256760
US-10-750-185-47485

Query Match          92.0%; Score 18.4; DB 6; Length 1191;
Best Local Similarity 95.0%; Pred. No. 2.6;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCCTGACGTT 20
    |||||
Db 205 TCCATGACGTTCCCTGATGTT 186
    |||||

RESULT 20
US-10-497-591A-37
; Sequence 37, Application US/10497591A
; Publication No. US20050250716A1
; GENERAL INFORMATION:
; APPLICANT: SCHMIDT, WALTER
; APPLICANT: SCHELLACK, CAROLA
; APPLICANT: EGYED, ALENA
; APPLICANT: LINGNAU, KAREN
; TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES
; FILE REFERENCE: SONN:045US
; CURRENT APPLICATION NUMBER: US/10/497,591A
; CURRENT FILING DATE: 2004-06-03
; PRIOR APPLICATION NUMBER: PCT/EP02/13791
; PRIOR FILING DATE: 2002-12-05
; NUMBER OF SEQ ID NOS: 113
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
; NAME/KEY: modified base
; LOCATION: (9)..(18)
; OTHER INFORMATION: n = inosine or uracil
US-10-497-591A-38

Query Match          90.0%; Score 18; DB 6; Length 20;
Best Local Similarity 90.0%; Pred. No. 2.8;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCCTGACGTT 20
    |||||
Db 1 TCCATGACNTTCCTGACNTT 20
    |||||

RESULT 21
US-10-497-591A-38
; Sequence 38, Application US/10497591A
; Publication No. US20050250716A1
; GENERAL INFORMATION:
; APPLICANT: SCHMIDT, WALTER
; APPLICANT: SCHELLACK, CAROLA
; APPLICANT: EGYED, ALENA
; APPLICANT: LINGNAU, KAREN
; TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES
; FILE REFERENCE: SONN:045US
; CURRENT APPLICATION NUMBER: US/10/497,591A
; CURRENT FILING DATE: 2004-06-03
; PRIOR APPLICATION NUMBER: PCT/EP02/13791
; PRIOR FILING DATE: 2002-12-05
; PRIOR APPLICATION NUMBER: A 1924/2001
; PRIOR FILING DATE: 2001-12-07
; NUMBER OF SEQ ID NOS: 113
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
; NAME/KEY: modified base
; LOCATION: (9)..(18)
; OTHER INFORMATION: n = inosine or uracil
US-10-497-591A-37

Query Match          90.0%; Score 18; DB 6; Length 20;
Best Local Similarity 90.0%; Pred. No. 2.8;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCCTGACGTT 20
    |||||
Db 1 TCCATGACNTTCCTGACNTT 20
    |||||

RESULT 22
US-11-127-654-303
; Sequence 303, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
```

APPLICANT: Krieg, Arthur M.
APPLICANT: Berg, Daniel J.
TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
TITLE OF INVENTION: INFLAMMATORY DISEASES
FILE REFERENCE: C1039.70060US01
CURRENT APPLICATION NUMBER: US/11/127,654
CURRENT FILING DATE: 2005-05-12
PRIOR APPLICATION NUMBER: US 10/112,653
PRIOR FILING DATE: 2002-03-29
PRIOR APPLICATION NUMBER: US 60/279,642
PRIOR FILING DATE: 2001-03-29
NUMBER OF SEQ ID NOS: 1040
SOFTWARE: PatentIn version 3.2
SEQ ID NO 303
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide
FEATURE:
NAME/KEY: misc feature
LOCATION: (8)..(8)
OTHER INFORMATION: I
FEATURE:
NAME/KEY: misc feature
LOCATION: (17)..(17)
OTHER INFORMATION: I
US-11-127-654-303

Query Match 90.0%; Score 18; DB 7; Length 20;
Best Local Similarity 90.0%; Pred. No. 2.8;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTGACGTT 20
|||||
Db 1 TCCATGANGTTCTGANGTT 20

RESULT 23
US-10-619-279-70
Sequence 70, Application US/10619279
Publication No. US20050267057A1
GENERAL INFORMATION:
APPLICANT: Krieg, Arthur M.
TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
FILE REFERENCE: C1039/7023/HCL
CURRENT APPLICATION NUMBER: US/10/619,279
CURRENT FILING DATE: 2003-07-14
PRIOR APPLICATION NUMBER: US 08/960,774
PRIOR FILING DATE: 1997-10-30
PRIOR APPLICATION NUMBER: US 08/738,652
PRIOR FILING DATE: 1996-10-30
PRIOR APPLICATION NUMBER: US 08/386,063
PRIOR FILING DATE: 1995-02-07
PRIOR APPLICATION NUMBER: US 08/276,358
PRIOR FILING DATE: 1994-07-15
NUMBER OF SEQ ID NOS: 123
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 70
LENGTH: 17
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-70

Query Match 85.0%; Score 17; DB 6; Length 17;
Best Local Similarity 100.0%; Pred. No. 8.8;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 ATGACGTTCTGACGTT 20
|||||
Db 1 ATGACGTTCTGACGTT 17

RESULT 24
US-11-127-654-66
Sequence 66, Application US/11127654
Publication No. US20050250726A1
GENERAL INFORMATION:
APPLICANT: Krieg, Arthur M.
APPLICANT: Berg, Daniel J.
TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
TITLE OF INVENTION: INFLAMMATORY DISEASES
FILE REFERENCE: C1039.70060US01
CURRENT APPLICATION NUMBER: US/11/127,654
CURRENT FILING DATE: 2005-05-12
PRIOR APPLICATION NUMBER: US 10/112,653
PRIOR FILING DATE: 2002-03-29
PRIOR APPLICATION NUMBER: US 60/279,642
PRIOR FILING DATE: 2001-03-29
NUMBER OF SEQ ID NOS: 1040
SOFTWARE: PatentIn version 3.2
SEQ ID NO 66
LENGTH: 17
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-66

Query Match 85.0%; Score 17; DB 7; Length 17;
Best Local Similarity 100.0%; Pred. No. 8.8;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 ATGACGTTCTGACGTT 20
|||||
Db 1 ATGACGTTCTGACGTT 17

RESULT 25
US-10-497-591A-12
Sequence 12, Application US/10497591A
Publication No. US20050250716A1
GENERAL INFORMATION:
APPLICANT: SCHMIDT, WALTER
APPLICANT: SCHELLACK, CAROLA
APPLICANT: EGYED, ALENA
APPLICANT: LINGNAU, KAREN
TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES
FILE REFERENCE: SOXN:045US
CURRENT APPLICATION NUMBER: US/10/497,591A
CURRENT FILING DATE: 2004-06-03
PRIOR APPLICATION NUMBER: PCT/EP02/13791
PRIOR FILING DATE: 2002-12-05
PRIOR APPLICATION NUMBER: A 1924/2001
PRIOR FILING DATE: 2001-12-07
NUMBER OF SEQ ID NOS: 113
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 12
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
OTHER INFORMATION: Primer
US-10-497-591A-12

Query Match 84.0%; Score 16.8; DB 6; Length 20;
Best Local Similarity 90.0%; Pred. No. 11;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTGACGTT 20
|||||
Db 1 TCCATGACGTTCTGATGCT 20

us-09-914-454b-1.rnpbn

Tue Jan 3 10:58:23 2006

```
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 73
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
; US-10-619-279-73

Query Match      84.0%; Score 16.8; DB 6; Length 20;
Best Local Similarity 90.0%; Pred. No. 11;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
   ||||| ||||| ||||| |||||
Db 1 TCCATGTCGTTCTCTGTCGTT 20

RESULT 29
US-10-435-656-7
; Sequence 7, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klimman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; US-10-435-656-7

Query Match      84.0%; Score 16.8; DB 6; Length 20;
Best Local Similarity 90.0%; Pred. No. 11;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
   ||||| ||||| ||||| |||||
Db 1 TCCATGACGTTCTCTGATGCT 20

RESULT 28
US-10-619-279-73
; Sequence 73, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
; US-10-619-279-73

Query Match      84.0%; Score 16.8; DB 6; Length 20;
Best Local Similarity 90.0%; Pred. No. 11;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
   ||||| ||||| ||||| |||||
Db 1 TCCATGACGTTCTCTGATGCT 20

RESULT 27
US-10-619-279-7
; Sequence 7, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
; US-10-619-279-73

Query Match      84.0%; Score 16.8; DB 6; Length 20;
Best Local Similarity 90.0%; Pred. No. 11;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
   ||||| ||||| ||||| |||||
Db 1 TCCATGACGTTCTCTGATGCT 20

RESULT 26
US-10-469-561-9
; Sequence 9, Application US/10469561
; Publication No. US20050260216A1
; GENERAL INFORMATION:
; APPLICANT: Claire Ashman
; APPLICANT: James Scott Crowe
; APPLICANT: Jonathan Henry Ellis
; APPLICANT: Alan Peter Lewis
; TITLE OF INVENTION: VACCINE
; FILE REFERENCE: PG4355USW
; CURRENT APPLICATION NUMBER: US/10/469,561
; CURRENT FILING DATE: 2003-08-29
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 20
; TYPE: DNA
; ORGANISM: unknown
; FEATURE:
; OTHER INFORMATION: synthetic immunostimulatory oligonucleotide
; US-10-469-561-9
```

US-10-435-656-35
; Sequence 35, Application US/10435656
; Publication No: US2005027760A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 35
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-35

Query Match 84.0%; Score 16.8; DB 6; Length 20;
Best Local Similarity 90.0%; Pred. No. 11;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

Search completed: December 30, 2005, 20:18:29
Job time : 191 secs

THIS PAGE BLANK (USPTO)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 30, 2005, 08:25:13 ; Search time 8 Seconds
(without alignments)
412.820 Million cell updates/sec

Title: US-09-914-454B-31

Perfect score: 2340

Sequence: 1 MKKYLFRALYGIARAILAA.....KTTGVVQLLPNGMKPEYRP 441

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 57103 seqs, 7488799 residues

Total number of hits satisfying chosen parameters: 57103

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : Published Applications AA New:*

- 1: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
- 4: /cgn2_6/ptodata/1/pubpaa/PTCT_NEW_PUB.pep.*
- 5: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
- 6: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
- 7: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
- 8: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2257	96.5	468	US-10-467-657-776	Sequence 776, Appl
2	94	4.0	503	US-10-793-626-1810	Sequence 1810, Ap
3	94	4.0	576	US-10-512-184-65	Sequence 65, Appl
4	94	4.0	625	US-10-512-184-47	Sequence 47, Appl
5	92	3.9	473	US-10-467-657-8108	Sequence 8108, Ap
6	90.5	3.9	1389	US-10-467-657-334	Sequence 334, Appl
7	89.5	3.8	7102	US-11-143-980-48	Sequence 48, Appl
8	86	3.7	1572	US-10-793-626-2906	Sequence 2906, Ap
9	85	3.6	808	US-11-110-082-38	Sequence 38, Appl
10	83.5	3.6	331	US-10-878-556A-45	Sequence 45, Appl
11	83.5	3.6	569	US-10-512-184-66	Sequence 66, Appl
12	83.5	3.6	618	US-10-512-184-48	Sequence 48, Appl
13	83	3.5	910	US-10-131-826A-112	Sequence 112, Appl
14	81.5	3.5	409	US-11-055-822-290	Sequence 290, Appl
15	81	3.5	534	US-11-082-389-348	Sequence 348, Appl
16	81	3.5	607	US-11-096-051-14	Sequence 14, Appl
17	81	3.5	2376	US-11-096-051-4	Sequence 4, Appl
18	81	3.5	2715	US-11-096-051-2	Sequence 2, Appl
19	81	3.5	2715	US-11-113-424-51	Sequence 51, Appl
20	81	3.5	2721	US-11-096-051-10	Sequence 10, Appl
21	81	3.5	2721	US-11-096-051-8	Sequence 8, Appl
22	79.5	3.4	1565	US-10-467-657-1784	Sequence 1784, Ap
23	78	3.3	392	US-10-467-657-1784	Sequence 1784, Ap
24	78	3.3	520	US-10-131-826A-144	Sequence 144, Appl
25	78	3.3	1394	US-10-467-657-7930	Sequence 7930, Ap

ALIGNMENTS

RESULT 1

US-10-467-657-776 7 5712 7 US-11-143-980-47 Sequence 47, Appl
US-10-467-657-776 6 400 6 US-10-793-626-2774 Sequence 2774, Ap
US-10-467-657-776 6 529 6 US-10-858-730-104 Sequence 104, Appl
US-10-467-657-776 6 529 6 US-10-858-730-105 Sequence 105, Appl
US-10-467-657-776 6 2657 6 US-10-821-234-1262 Sequence 1262, Ap
US-10-467-657-776 6 287 6 US-10-467-657-5866 Sequence 5866, Ap
US-10-467-657-776 6 745 6 US-10-131-826A-68 Sequence 68, Appl
US-10-467-657-776 6 745 6 US-11-135-855-37 Sequence 37, Appl
US-10-467-657-776 6 372 6 US-10-793-626-1632 Sequence 1632, Ap
US-10-467-657-776 6 1006 6 US-10-467-657-8400 Sequence 8400, Ap
US-10-467-657-776 6 1263 6 US-10-485-517-127 Sequence 127, Appl
US-10-467-657-776 6 1394 7 US-11-115-639-52 Sequence 52, Appl
US-10-467-657-776 6 1394 7 US-11-115-639-53 Sequence 53, Appl
US-10-467-657-776 6 1394 7 US-11-115-639-54 Sequence 54, Appl
US-10-467-657-776 6 1394 7 US-11-115-639-55 Sequence 55, Appl
US-10-467-657-776 6 219 7 US-11-170-653-29 Sequence 29, Appl
US-10-467-657-776 6 405 6 US-10-467-657-2310 Sequence 2310, Ap
US-10-467-657-776 6 423 7 US-11-055-822-258 Sequence 258, Appl
US-10-467-657-776 6 457 6 US-10-467-657-5134 Sequence 5134, Ap
US-10-467-657-776 6 782 6 US-10-821-234-1592 Sequence 1592, Ap

Query Match: 96.5%; Score 2257; DB 6; Length 468;
Best Local Similarity 95.7%; Pred. No. 2.3e-190;
Matches 422; Conservative 9; Mismatches 10; Indels 0; Gaps 0;

QY 1 MKKYLFRALYGIARAILAACQSKIOTFPDPTSVINGPDRPVGIPDPAGTTVGGGAV 60
Db MKKHLRLSALYGIARAILAACQSKIOTFPDPTSVINGPDRPVGIPDPAGTTVGGGAV 87
QY 61 YTVVPHLSLPHWAAQDFAKSLQSPRLGCANLKNRQGWQDVCAQAFQTPVHSFOAKQFFER 120
Db YTVVPHLSLPHWAAQDFAKSLQSPRLGCANLKNRQGWQDVCAQAFQTPVHSFOAKQFFER 147
QY 121 YTFPMQVAGNSLAGTGTGTYEPVLKGDRTAQAARFIYIGIPDDFISVPLPAGLRSGKA 180
Db YTFPMQVAGNSLAGTGTGTYEPVLKGDRTAQAARFIYIGIPDDFISVPLPAGLRSGKN 207
QY 181 LVRIQTKNSGTIDNTGTTADLSRPTARTTAIKGRFEGSRLFPVHTNQINGGAL 240
Db LVRIQTKNSGTIDNTGTTADLSRPTARTTAIKGRFEGSRLFPVHTNQINGGAL 267
QY 241 DGKAPILGYAEDPVELPFPMHIQSGSRLKTPSGKYIRIGYADKNEHPYVSIGRYMDKGYL 300
Db DGKAPILGYAEDPVELPFPMHIQSGSRLKTPSGKYIRIGYADKNEHPYVSIGRYMDKGYL 327

US-10-467-657-776
; APPLICANT: CHIRON Spa
; APPLICANT: FONTANA Maria Rita
; APPLICANT: PIZZA Mariagrazia
; APPLICANT: MASIGNANI Vega
; APPLICANT: MONACI Elisabetta
; TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/467,657
; CURRENT FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: GB-0103424.8
; PRIOR FILING DATE: 2001-02-12
; NUMBER OF SEQ ID NOS: 9218
; SOFTWARE: SeqWin99, version 1.04
; SEQ ID NO 776
; LENGTH: 468
; TYPE: PRT
; ORGANISM: Neisseria gonorrhoeae
US-10-467-657-776

```
Qy 301 KLGQTSMQGIKSYNRQNPORLAELVGLQNPYSIFFRELAGSSNDGPGVGLGTPPLMGEYAGA 360
Db 328 KLGQTSMQGIKAYNRQNPORLAELVGLQNPYSIFFRELAGSGNEGPGVGLGTPPLMGEYAGA 387
Qy 361 VDRHYITLGAFLPVATAPVTRKALNRLIQAODTGSALDGAVRVDYFWGYGDEAGELAGK 420
Db 388 IDRYITLGAFLPVATAPVTRKALNRLIQAODTGSALDGAVRVDYFWGYGDEAGELAGK 447
Qy 421 QKTTGYVWQLLPNGMKPEYRP 441
Db 448 QKTTGYVWQLLPNGMKPEYRP 468

RESULT 2
US-10-793-626-1810
; Sequence 1810, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: P03480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1810
; LENGTH: 503
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-10-793-626-1810

Query Match 4.0%; Score 94; DB 6; Length 503;
Best Local Similarity 20.2%; Pred. No. 0.85;
Matches 76; Conservative 47; Mismatches 128; Indels 126; Gaps 17;

Qy 137 VTGYEYVPLKGGD-RRTAQ-ARFPI- - - - -YCIPOD- - - - - 165
Db 75 ILGPEEISEGDEVKTRGRIMEVPVGEEMIGRVNPLGQPIDGQPINATKTRPVEKKAT 134
Qy 166 - - - - -FISVPLPAGLRSGKALVRI- - - - -ROTGNSGTIDNTGTHTAD--LS 206
Db 135 GVMDRKSVDPLQTGKIKALDVLPIGRQRELIIGDRTGKTVAIDSLILNQDQDTICI 194
Qy 207 RPPITARTAIKGRFEGSRFLPYHTRNQINGALDGKAPILGYAEDPVELPFMHIIQGS-- 264
Db 195 YVAIGQKDSIVRANVEKLR- - - - -QAGALDYTIIVWSASAADPAPLLYIAPYSGVT 244
Qy 265 -GRUKTPSGKYIRIGYADKNEHPYVSYIGRYMADKGLKLGOTSMQGIKSYNRQNPORLAEL 323
Db 245 MGEFPMFKGKHLVIYDD- - - - -LTKQAAVRELSLLLRPPGREA- 285
Qy 324 VLQGNPSYIFF- - - - -RELAGSSND- - - - -GPVGLGTPLMGEYAGAVDRH- - - - - 364
Db 286 - - - - -YPGDVFFYLHSLERLERAALNDLGGSGITAL--PIETQAGDISAYVPTNVISITD 339
Qy 365 -YITLGAFLPVATAPVTRKALNRLIQAODTGSALDGAVRVDY- - - - -IDGAVRVDY- - - - -FW 408
Db 340 GQIFLQSLDFFSGVRPAINAGQS- - - - -VSRVGSQAQIKAMKVKVAGTGLRLDLASVRELESFA 396
Qy 409 GYGEAGELAGKQKTTG 425
Db 397 QFGSOLDFTAKKLARG 413

RESULT 3
US-10-512-184-65
; Sequence 65, Application US/10512184
; Publication No. US20050244901A1
```

```
; GENERAL INFORMATION:
; APPLICANT: Fraunhofer Gesellschaft zur F"rderung der angewandten Forschung e.V.
; TITLE OF INVENTION: Antibodies, recombinant antibodies, recombinant
; TITLE OF INVENTION: antibody fragments and fusions mediated plant disease
; TITLE OF INVENTION: resistance against fungi
; FILE REFERENCE: 3581.01US01
; CURRENT APPLICATION NUMBER: US/10/512,184
; CURRENT FILING DATE: 2004-10-22
; NUMBER OF SEQ ID NOS: 72
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 65
; LENGTH: 576
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: precursor
; OTHER INFORMATION: fusion protein comprising chitinase - linker -
; OTHER INFORMATION: scfv CWPD2.
US-10-512-184-65

Query Match 4.0%; Score 94; DB 6; Length 576;
Best Local Similarity 19.8%; Pred. No. 1;
Matches 102; Conservative 50; Mismatches 156; Indels 206; Gaps 26;

Qy 21 CQSKSIQTFPPQDTSVINGPDRPVGIPDPAGTTVGGGAVVT- - - - -VPHLSLPHWAA 74
Db 36 CQSQ- - - - -CNGCGGGGTVPVPTPTG- - - - -GGVSSIIISQSLFQDMLLRNDAAQCA 83
Qy 75 QDF- - - - -AKSLQSF-RLGCANLKNRQ- - - - -GW- - - - - 97
Db 84 KGFYNYGAFVAAANSFSGFATGTGGADVRKREVAFLAQTSHETGGTAPDGPYSWGVC 143
Qy 98 - - - - -QDVCAQAFQTPVHVSFOAKOFFERYFPPMVQVAGN- - - - -GSLAGT- - - - - 136
Db 144 ENQERGAADYCSNQPW- - - - -CAPGKYFGR- - - - -GPIQISYNYNGPAGRAIGTDLNNPD 199
Qy 137 - - - - -VTGYEYVPLKGGD-RRRTAQARPIYIGIPDDF 166
Db 200 LVATDATVSPKALWFNMTPOSKPSSHVDITGRWSP--SGADQ--AAGRPVGYGVITNI 255
Qy 167 ISVPLPAGLRSGKALVRIQTKNSGTIDNTGTHTADLSRFPITARTAIKGRFEGSRF 226
Db 256 IN- - - - -GGELEGR- - - - -GQDGRVADRIG- - - - -FYKYCDLIGVSYGDNL 292
Qy 227 LPYHTRN-QINGGALDGKAPILGYAEDPVELPFMHIIQSGRLKTPSGKYIRIGYADKNEH 285
Db 293 DCTNQRPPAVDGGGGGG- - - - -GSAAPAMAAVTLDESGLQTPGG- - - - - 336
Qy 286 PYVSGIRYMADKGLKLGOTSMQGIKSYMRQNPORLAELVGLQNPYSIFFRELAGSSNDGP 345
Db 337 - - - - -GLSLVCKG- - - - -SGDFPSDITMMWRQAPKGLEF- - - - -VAGISGDS 376
Qy 346 VGLGTPLMGEYAGAVDRHYITLGAFLPVATAPVTRKALNRLIQAODTGS- - - - - 396
Db 377 DTYNSAVKGRATISRNGQSTV- - - - -RLQLNLL-RAEDTATYCYTRGPCS 422
Qy 397 - - - - -AIDGAVRVDYFWGYGDEAGELAGKQKTTG 425
Db 423 PTKNCAAD- - - - -RID-AMHGTEVTVSSGSTSGS 452

RESULT 4
US-10-512-184-47
; Sequence 47, Application US/10512184
; Publication No. US20050244901A1
; GENERAL INFORMATION:
; APPLICANT: Fraunhofer Gesellschaft zur F"rderung der angewandten Forschung e.V.
; TITLE OF INVENTION: Antibodies, recombinant antibodies, recombinant
; TITLE OF INVENTION: antibody fragments and fusions mediated plant disease
; TITLE OF INVENTION: resistance against fungi
; FILE REFERENCE: 3581.01US01
; CURRENT APPLICATION NUMBER: US/10/512,184
; CURRENT FILING DATE: 2004-10-22
```



```
; TYPE: PRT  
; ORGANISM: Neisseria gonorrhoeae  
US-10-467-657-8108
```

Query Match 3.9% Score 92; DB 6; Length 473;
Best Local Similarity 20.7%; Pred. No. 1.2;
Matches 56; Conservative 42; Mismatches 90; Indels 82; Gaps 13;

```
Oy      223   GSRLFLPHTNRQINGGALDCKAPILGYAEDPVLEFFMHIOGSGLKTPSGKYIRIGVADK 282  
  
Db      31    GRVTSTYPTANRSPDPBPGE-----VIKTWISCGMAIANVPISLYTIDPCNT 78  
  
          | :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|  
          + -+ -+ -+ -+ -+ -+ -+ -+ -+ -+ -+ -+ -+ -+ -+ -+
```

Qy	283	NEHPYVSIGRYMA-DKG-----YLKLGQTSMOGIKSYMRQNQPORLAEVL--GQNPSTI---	332
Db	80	ICY-YCGCNKIITKDSRADTYIEYLEKEWELLAPHLNGRHQ-LAQLHFGGGTPTPLSDS	137
Qy	333	----FFR-----ELAGSSNDGPVGLGTPLMGREYAGAVDRHVTITLGAFLF-	373
Db	138	QIBRVFRMIRKHPELIPS-----GEYSIEDPRKVSRTDVLMLGRLGFRNM	183
Qy	374	---VATAHPYTRKALANLIWAOTGSALDCA-----VRVDYFWGVGDENAGLAGOKT	423
Db	184	SVGIQDDPKVQAANNRIQSRYETKEVIDAARBAKPKSVDLIYGLPHQTSE---SIKT	240
Qy	424	T-----GYVMQLLPNKMPEYR	440
Db	241	TIDTVLSLDPDLRLAHVHYAHLPHVPFKQR	270
RESULT 6			
US-10-467-657-334			
; Sequence 334, Application US/10467657			
; Publication No. US20050260581A1			

```

: APPLICANT: CHIRON SpA
: APPLICANT: FONTANA Maria Rita
: APPLICANT: PIZZA Mariagrazia
: APPLICANT: MASIGNANI Vega
: APPLICANT: MONACI Elisabetta
: TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
: FILE REFERENCE:
: CURRENT APPLICATION NUMBER: US/10/467,657
: CURRENT FILING DATE: 2003-08-11
: PRIOR APPLICATION NUMBER: GB-0103424.8
: PRIOR FILING DATE: 2001-02-12
: NUMBER OF SEQ ID NOS: 9218
: SOFTWARE: Seqwin99, version 1.04
: SEQ ID NO 334
: LENGTH: 1389
: TYPE: PRT
: ORGANISM: Neisseria gonorrhoeae

```

Query Match	3.9%;	Score 90.5;	DB 6;	Length 1389;
Best Local Similarity	20.4%;	Pred. No. 7.1;		
Matches 106;	Conservative 51;	Mismatches 179;	Indels 183;	Gaps 25;

Qy	39	GPDRPV-----	GTPDPAGTTVGGGAVTVVPHLS	-----	68	
		:	: :	: :		
Db	645	GTSRPMRADIKGGRLSLSGAAVVDVDTAGLTGTAQHRITHAAMTLDGPKFKLLDAS			704	
Qy	69	-----LPHWAAQDPAKSLQSFRLGCA--	NLKNRQ-----	GWQDVCAQA--	FQTPVHSFQ 113	
Db	705	GGINRELTRWKG-----	SIGILDIGGAFNKLQNRMTLEAGAEHVAASAANWQAMGSLN		759	
Qy	114	AKOFFERYFPWQ-----	VAGNGSLAG--	TVTGYTEP-----	VLKGD-----	148
		: :	: :	: :		
Db	760	LQHF-----	SWDRKTCISAKGGARGLHIAELNFPKPPPEHNLVLNGDWDVAYGHNARG		813	
Qy	149	-----DRRTAQARPP-----	IYGI-----	PDPFISVPLPAGLRSGKALVRIRQTGNKSG		192
		: :	: :	: :		
Db	814	YLNISRQSGDAVLPGGQALGSLNAPSLKTRPFQNDRIGILLDGGARFGRINADLIGNAFGG				873

Qy 193 TIDNT--GGTHTADLSRPITARTTAIKRFEGRPLPYHTRNQINGALDCKAPILGYA 250
Db 874 NMANTPLGGRTASLPDL-----GALK-----PFLPAAQNIT--GSLNASAQIGRV 919
Qy 251 BDP--VELPFMHIOGSGRLK-----TPSGKYIRIGYADKNEHPVYSIGRYMAD 296
Db 920 GSPSVAANVSSNYKINGNITVQSRSFDTAPLGGRLNITVADAE-----AP 968
Qy 297 KGYIKLQGT-----SMOGIKSYMRONPQRLAEVLGQNPYSIFF 334
Db 969 RNFLPVGQTVKSGSLNAAVTLGGSIAADPHLGSGINDKLYRNQTOGIIIDNGSLRSHAG 1028
Qy 335 RELAGSS-----NDGPVGLGTFPLACEYA-----GAVDEHYITLGAFLVATAHPVTRKAL 385
Db 1029 RKWIDSLKFRHEGTAELSGTVSMENSVDPVDIGAVFDKRYILSRP-----NRRLTVSGN 1083
Qy 386 NRLIMAQDQSAIDGAVRVVDYFWGYGDEAGLAGKQKTT 424
Db 1084 TRLAYSPOKGISVTGMKTDQ-----GLFGSQKSS 1113
RESULT 7
US-11-143-980-48
; Sequence 48, Application US/11143980
; Publication No. US20050272133A1
; GENERAL INFORMATION:
; APPLICANT: He, Min
; APPLICANT: Hucul, John
; APPLICANT: Haltli, Bradley A.
; APPLICANT: Wagenaar, Melissa M.
; APPLICANT: Graziani, Edmund
; APPLICANT: Summers, Mia
; APPLICANT: Kulowski, Kerry
; APPLICANT: Pong, Kevin
; TITLE OF INVENTION: Biosynthetic Gene Cluster for the Production of a Complex
; FILE REFERENCE: AM-101426US
; CURRENT APPLICATION NUMBER: US/11/143,980
; CURRENT FILING DATE: 2005-06-03
; PRIOR APPLICATION NUMBER: US 60/664,483
; PRIOR FILING DATE: 2005-03-23
; PRIOR APPLICATION NUMBER: US 60/576,895
; PRIOR FILING DATE: 2004-06-03
; NUMBER OF SEQ ID NOS: 72
; SOFTWARE: Patent in version 3.3
; SEQ ID NO 48
; LENGTH: 7102
; TYPE: PRT
; ORGANISM: Streptomyces sp.
US-11-143-980-48

Query Match 3.8%; Score 89.5; DB 7; Length 7102;
Best Local Similarity 24.6%; Pred. No. 84;
Matches 67; Conservative 31; Mismatches 93; Indels 81; Gaps 16;
Qy 128 AGNSLAGTVGYEYVPLKGDRTAARFP-IVGIPDDFISVPLPA-GLRSG--KALVR 183
Db 5988 AVNGPVTVSVSGAVE-VLDG-----VLAEPFPEARRIPVDYASHSVQVEGIREGLAEALAP 6041
Qy 184 IRQTKNSGTTDNTGGTHTADLSRP-PITAR--TTAIKGRPEGRFLPHYTRN----- 233
Db 6042 VR-----PRTGEVPFYSTVTGLMDVTGLDGE-----YWRNLRETVE 6079
Qy 234 -QINGGALDGKAPILGVAEDPVELFFMHIOGSGRLKTPSGKYIRIGYADKNEHPVYSIGR 292
Db 6080 FQSTVEALIGQHTVFVEASHPHVLTVGVQDT-----ADAMETIVATGS 6124
Qy 293 YMAKGYLK-----LGQTSMOGIKSYMRONPQRLAEVLGQ-----PSYIFFRE---LAGS 340
Db 6125 LRDEGGVRRFLTSLAEVSHVHIE-----VNMQTVFDGTGARRVDLPTTAVAFQRRERFLVPS 6180
Qy 341 SNDGPVGLGTFPLMGEYAGVDRHYITLGAFL 372

Db 6181 TGTGDASGLG-----LGAVDHPLLGAAVPL 6205
RESULT 8
US-10-793-626-2906
; Sequence 2906, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 2906
; LENGTH: 1572
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-10-793-626-2906
Query Match 3.7%; Score 86; DB 6; Length 1572;
Best Local Similarity 22.3%; Pred. No. 21;
Matches 92; Conservative 44; Mismatches 171; Indels 106; Gaps 22;
Qy 49 PAGTTVGGGAVTVVPHLSLPHWAAQDFAKSIQSLFRGCANLKNRQGWQDVCAQAPQTP 108
Db 1029 PKGSSVYSGAQT-----HAILNSGYDTKKKKLPKFSKG---TKKKDGLDVISSGVKND 1080
Qy 109 VHSP-----QAKQFFERYFTPWQVAGNSL-----AGTVGYEYVPLKGD 150
Db 1081 VNKVDIGKARDIGGTTTDPKAKDITGKALDKADKDVSTVIKIGDVFV-----GHPM 1135
Qy 151 RTAQAQRPYIGIPDDFI-SVPLPAGLRSGKALVRIOTG-----KNSGTIDNTGTHPADL 205
Db 1136 KLVNKFVKGVNLDPMKNAPLPDLMT--AMIKLKNGLKDFNEG-LDSAGGGDSSSF 1192
Qy 206 SRPPIIT-----ARTTAIKRPEGRSF-----LPVHTR-NQINGALD-----GKAPI 246
Db 1193 TKFPITTYGYPNGAGPGYSFNG---GAHFGIDYGAPYGTITNATNDGNVKAHNLGGGLV 1249
Qy 247 LGYAEQDVELPFMHI-----QSGRLKTPSGKYIRIGYADKNEHPVYSIGRYMAD----- 296
Db 1250 ARLLTGQFTLFFMHLISKILKQGIKAGEPMKGTNSGQWTTGPHVHPQVERGRHDDITNR 1309
Qy 297 -----KGYLKLQTSMOGIKSY-MRONPQRLAEVLG--QNPSYIFFREL----- 337
Db 1310 GTVNPAKWLKGH---GGKVGSGSSVNAARAIQRAQSILGGRYKSSVITQMMRVAKRES 1366
Qy 338 ---AGSNDGPVGA-LGTPLMGEYAGVDRHYITLGAFLVATAHPVTRKALN 386
Db 1367 NFQSDAVNNWDINAQKGTSPKGMF-----QMTIEPSRAVAKPGHGNILN 1410
RESULT 9
US-11-110-082-38
; Sequence 38, Application US/11110082
; Publication No. US20050266558A1
; GENERAL INFORMATION:
; APPLICANT: Denner, Jeroen
; APPLICANT: Hall, Claire
; APPLICANT: Norris, Michael Geoffrey
; APPLICANT: Saulsbury, Keith Martin
; TITLE OF INVENTION: Compositions Isolated from Forage
; FILE REFERENCE: 11000,1074Uc1
; CURRENT APPLICATION NUMBER: US/11/110,082
; CURRENT FILING DATE: 2005-04-19

;; PRIOR APPLICATION NUMBER: 60/563,723
;; PRIOR FILING DATE: 2004-04-20
;; PRIOR APPLICATION NUMBER: 10/655,799
;; PRIOR FILING DATE: 2003-09-05
;; PRIOR APPLICATION NUMBER: 60/408,782
;; PRIOR FILING DATE: 2002-09-05
;; NUMBER OF SEQ ID NOS: 40
;; SOFTWARE: PaetSeq for Windows Version 4.0
;; SEQ ID NO 38
;; LENGTH: 808
;; TYPE: PRT
;; ORGANISM: Festuca arundinacea
US-11-110-082-38

Query Match 3.6%; Score 85; DB 7; Length 808;
Best Local Similarity 21.1%; Pred. No. 10;
Matches 87; Conservative 54; Mismatches 166; Indels 106; Gaps 23;
QY 22 QSKSIQTTPQDPTSVINGPDRP-----VGIPDPAGTTVGGGAVYTVVPHL----- 67
DB 175 QOOLSQQFPQIQSOQVIGIPQQLRLPLAQPGWQLAGVPTPVESGLCSRRLMQYLFHR 234
QY 68 -----SLPHWAA---QDFAKSLQSFRLGCAKLNKRGQWDVCAQAFQ---TPVHSFOA 114
DB 235 HRPEDNPITYWRKLIDEYFAP-----RAREW---CVSSYEKRGNSPVAIPQT 279
QY 115 KQFFERYTPQOV-----AGNGLAGTGTGYEYVPLKGGDRRTAQAAPPIYGPDDFIS 168
DB 280 SQ-----DTRWCDCINTHAGKHEA-----TYEIL-----PRLCQIRFD-QGVIDEYLF 322
QY 169 VPLPAGLSGKALVRIOTGKNSGTI-DNTGGTHTADLSRPILTARTTAIKRGPSRFL 227
DB 323 LDMPEFLPLNGLLEHTKVQKSIYDHLVTHEGQL-RIIFTEPKIMSWEPSCRRHD 381
QY 228 PYHTRN-----QIN-----GGALDGKAPITLGYAEDPVELFFMHIIQSGRLKTPSGKY 274
DB 382 EYITERELTPQVNHMLQVAQYQAANESGPAGVSNDDAQALCSMFVSASRLAK----- 436
QY 275 IRIGVADKNEH-----PYV-----SIGRYMAD-----KYLKLGQTSMOGKISYMRQ-NPQ 319
DB 437 -NLDHHSLSNEHGLSKRYVCLQISEVNVNMDLIEFHSKHLG--PIEGLKNYPRQTGPK 493
QY 320 RLAEVLGQNPSYIPRELAGSNDGP-VGALGTPLMGVAGAVDRHYITLGP 371
DB 494 LTTQNHDAKGVVKTTESTHVNNEGPDGAPGS---SPONAGAQNYYQNMLRSP 544

RESULT 10
US-10-878-556A-45
;; Sequence 45, Application US/10878556A
;; Publication No. US20050266399A1
;; GENERAL INFORMATION:
;; APPLICANT: Hoffmann La-Roche Inc.
;; TITLE OF INVENTION: HCV regulated protein expression
;; FILE REFERENCE: 21762
;; CURRENT APPLICATION NUMBER: US/10/878,556A
;; CURRENT FILING DATE: 2004-06-28
;; NUMBER OF SEQ ID NOS: 199
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 45
;; LENGTH: 331
;; TYPE: PRT
;; ORGANISM: Homo sapiens
;; PUBLIC INFORMATION:
;; DATABASE ACCESSION NUMBER: sw hum/ldha_human
;; DATABASE ENTRY DATE: 1986-07-21
US-10-878-556A-45

Query Match 3.6%; Score 83.5; DB 6; Length 331;
Best Local Similarity 23.9%; Pred. No. 4;
Matches 33; Conservative 26; Mismatches 62; Indels 17; Gaps 6;
QY 68 SLPHWAAQDPA-KSLQSFRLGCAKLNKRGQWDVCAQAFQTPVHSFOAKQFFERYTPWQ 126

DB 196 SVPVWSGNNVAGVSLKTLHPDLGTDKQKQKQVHKQVSESAYEVIKLG-----YTSW- 249
QY 127 VAGNGLAGTGTGYEYVPLKGGDRRTAQAAPPI---YGIPDD-FISVPLPAGLSGKALV 182
DB 250 -----AIGLSVADLAESIMK-NLRRVHPVSTMIGLYGKIDDDVFLSVPCILGQNGISDLV 303
QY 183 RIRQTGKNSGTIDNTGGT 200
DB 304 KVTLTSEEARLKKSADT 321
RESULT 11
US-10-512-184-66
;; Sequence 66, Application US/10512184
;; Publication No. US20050244901A1
;; GENERAL INFORMATION:
;; APPLICANT: Fraunhofer Gesellschaft zur F"orderung der angewandten Forschung e.V.
;; TITLE OF INVENTION: Antibodies, recombinant antibodies recombinant
;; TITLE OF INVENTION: antibody fragments and fusions mediated plant disease
;; TITLE OF INVENTION: resistance against fungi
;; FILE REFERENCE: 3581.01US01
;; CURRENT APPLICATION NUMBER: US/10/512,184
;; CURRENT FILING DATE: 2004-10-22
;; NUMBER OF SEQ ID NOS: 72
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 66
;; LENGTH: 569
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: precursor
;; OTHER INFORMATION: fusion protein comprising chitinase - linker -
;; OTHER INFORMATION: scFv VD2.
US-10-512-184-66

Query Match 3.6%; Score 83.5; DB 6; Length 569;
Best Local Similarity 18.8%; Pred. No. 8.4;
Matches 91; Conservative 48; Mismatches 157; Indels 189; Gaps 23;
QY 21 CQSKIQTTPQDPTSVINGPDRPVGIPDPAGTTVGGGAVYT-----VPHLSLPHWAA 74
DB 36 CQSQ-----CNGCSGGGTVPVPTPTG---GGVSSIIISQSLFDQMLLRNDAAQCA 83
QY 75 QDP-----AKSLQSF-RLGCANLKNRQ-----GW----- 97
DB 84 KGFYNYGAFVAAANSPSGFATTGGADVRKREVAAPLAQTSHTTGGWPTAPDGPYSWGYC 143
QY 98 -----QDVCAQAFQTPVHSFOAKQFFERYTPWQVAGN-----GSLAGT----- 136
DB 144 FNOBRGAASYCSPNSOMP--CAPGKKYFGR--GPIQISYNYNYGPAAGRAIGTDLNNPD 199
QY 137 -----VTGYEYVPLKGGDRRTAQAAPPIYGPDDF 166
DB 200 LVATDATVSPKTAFLWFWMTPOSKPSSHDVITGRWSP--SGADQ--AAGRVPYGYVITNI 255
QY 167 ISVPLPAGLSGKALVRIOTGKNSGTIDNTGGTHTADLSRFPITARTTAIKRPEGRSF 226
DB 256 IN-----GGLECGR-----GQDGRVADRIG-----FYKRYCDLLGVSYGDNL 292
QY 227 LPYHTRN-QINGGALDGKAPILGYAEDPVELFFMHIIQSGRLKTPSGKYIRIG----- 278
DB 293 DCYNORPFAVDGGGGSGG---GSAAPAMAAQIQLVQSGPGLKKP-GETVKSICKVSGDN 348
QY 279 -----YADKNEHPYVYSIGRYMADKGLVGLKLGQTSM 307
DB 349 PTNYGMQWVKAQPGKGLKMWGWINTYTGEATYADDKGRFAPFSLSTSASTAYLQINLKN 408
QY 308 QGKISYMRQNPQRLAEVLGQNPSYIPRELAGSNDGPVAGLGTPLMGEYAGAVDRHYIT 367
DB 409 EDTATYF-----CARFLG-NPYIVM--DYNGQGTSTVTSAGGGGGGGGGSDVLM 459
QY 368 LGAPL 372

Db 736 -----GYSLEGAAMLTCSRDTGT-----KWSRVPKCALKYPCNLNPGVGVQ 782
Qy 281 DKNEHPYVIG---RYMDKGYLKLQOTSMQIKSYMRQ-----NPORLAE 323
Db 783 TLXKHY-QAGSLRFPFCYGPGLIGEVITTCVPGHPQWTSQPPCLKVKTQTTDPSRQLE 841
Qy 324 -----VLQNPSPYIFFRELAGSSNDGPVGA 348
Db 842 GGNLALAILPLGLVILVLSG-VIYYTYKLQKSLPGFSGS 881

RESULT 14
US-11-055-822-290
; Sequence 290, Application US/11055822
; Publication No. US20050260707AI
; GENERAL INFORMATION:
; APPLICANT: Pompejus, Markus
; APPLICANT: Kroger, Burkhard
; APPLICANT: Schroder, Hartwig
; APPLICANT: Zelder, Oskar
; APPLICANT: Haberhauer, Gregor
; TITLE OF INVENTION: CORYNEBACTERIUM GLUTAMICUM GENES ENCODING
; TITLE OF INVENTION: METABOLIC PATHWAY PROTEINS
; FILE REFERENCE: BGI-121PCN
; CURRENT APPLICATION NUMBER: US/11/055,822
; CURRENT FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 09/606,740
; PRIOR FILING DATE: 2000-06-23
; PRIOR APPLICATION NUMBER: 60/141,031
; PRIOR FILING DATE: 1999-06-25
; PRIOR APPLICATION NUMBER: 60/142,101
; PRIOR FILING DATE: 1999-07-02
; PRIOR APPLICATION NUMBER: 60/148,613
; PRIOR FILING DATE: 1999-08-12
; PRIOR APPLICATION NUMBER: 60/187,970
; PRIOR FILING DATE: 2000-03-09
; PRIOR APPLICATION NUMBER: DE 19930476.9
; PRIOR FILING DATE: 1999-07-01
; PRIOR APPLICATION NUMBER: DE 19931415.2
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931418.7
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931419.5
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931420.9
; PRIOR FILING DATE: 1999-07-08
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1158
; SEQ ID NO 290
; LENGTH: 409
; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum
US-11-055-822-290

Query Match 3.5%; Score 81.5; DB 7; Length 409;
Best Local Similarity 22.8%; Pred. No. 8;
Matches 97; Conservative 39; Mismatches 136; Indels 153; Gaps 27;

Qy 137 VTGYEPEVLKGDRTAQRPIYGIPD--DFISVPLPAGLR-----SGKALVRIQTKG 189
Db 4 VTGL--PVTYPSQEASIGSPAVD-PDTKSAAYCHESGWRERISNAKRVVVKI---GS 57

Qy 190 NSGTTDNGTHTADLSRPTTARTATKGRPE-GSRFLPYHTRNQINGALDGKAPILG 248
Db 58 SSLTNDDEG--HTVDPNR--INTIYNALQARMEAGSDLIIVS-----SGVAAGMAP-LG 107

Qy 249 YAEDPVEL-----PFMHQGS--GELKTPSGKYIRIGYADKNEHPYVYSGHYM 294
Db 108 LSTRETELAVQAAAAGVQVHLHMQWGRSFARYGRPIGO-VLLTAADAGK-----RDR 159

Qy 295 ADKGYLKLQOTSMQIKSYMRQNP-----QRLAEVLQO----- 327
Db 160 ARNAQRTIDKLRIILGAVPIVNEVDVATTVGNFGDNDRLAIAIVHLVSADALVLLSDVDG 219

Qy 328 -----NPSYIPFRELAGSSND-----GPVGALCTPLMCEYAGAVDRHYITIGAPLPV 374
Db 220 LFDKNPTDPTAKFTSEVR-DGNDLKGVTAGDGGKVGTTGMAKVSAA-RLASRSRGVPVLL 277
Qy 375 ATA-----HPVTRKALNRL-----IMADQTSAGI---DCAVRVDYFW 408
Db 278 TSAANIGPALEDAQGVTFHPKD-----NRLSAWKFWALYAADTAGKRLDDGAVEAVTSG 333
Qy 409 G-----YGD-----BAGELAGK-----QKTTYVWQLLPNGMK 436
Db 334 GKSLAVGITEIIGDFOQGEIVELILGPAGQIIGRGEVSYSDTLQSMVGMQTDLPDGMQ 393
Qy 437 PEYRP 441
Db 394 ---RP 395

RESULT 15
US-11-082-389-348
; Sequence 348, Application US/11082389
; Publication No. US20050244935AI
; GENERAL INFORMATION:
; APPLICANT: Pompejus, Markus
; APPLICANT: Kroger, Burkhard
; APPLICANT: Schroder, Hartwig
; APPLICANT: Zelder, Oskar
; APPLICANT: Haberhauer, Gregor
; TITLE OF INVENTION: CORYNEBACTERIUM GLUTAMICUM GENES ENCODING PROTEINS
; TITLE OF INVENTION: INVOLVED IN MEMBRANE SYNTHESIS AND MEMBRANE
; FILE REFERENCE: BGI-131PCN
; CURRENT APPLICATION NUMBER: US/11/082,389
; CURRENT FILING DATE: 2005-03-16
; PRIOR APPLICATION NUMBER: US 09/603024
; PRIOR FILING DATE: 2000-06-23
; PRIOR APPLICATION NUMBER: US 60/141031
; PRIOR FILING DATE: 1999-06-25
; PRIOR APPLICATION NUMBER: US 60/143262
; PRIOR FILING DATE: 1999-07-09
; PRIOR APPLICATION NUMBER: US 60/151281
; PRIOR FILING DATE: 1999-08-27
; PRIOR APPLICATION NUMBER: DE 19930487.4
; PRIOR FILING DATE: 1999-07-01
; PRIOR APPLICATION NUMBER: DE 19930489.0
; PRIOR FILING DATE: 1999-07-01
; PRIOR APPLICATION NUMBER: DE 19931549.3
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931550.7
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19932134.5
; PRIOR FILING DATE: 1999-07-09
; PRIOR APPLICATION NUMBER: DE 19941379.7
; PRIOR FILING DATE: 1999-08-31
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 446
; SEQ ID NO 348
; LENGTH: 534
; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum
US-11-082-389-348

Query Match 3.5%; Score 81; DB 7; Length 534;
Best Local Similarity 19.7%; Pred. No. 13;
Matches 102; Conservative 64; Mismatches 169; Indels 184; Gaps 30;

Qy 14 AAAT---LAACQSKSIOTFFQPDTS-----VING--PDRPVGIPDPAGTIVG 55
Db 12 AAALALSAACSDS-----SSDSSSSSGEGDNYLVNGTFEPQNPPL---VEFGNTNEV 63

Qy 56 GGG-----AVTVVPHLSLPHWAAQDFAKSLQ-----SFLGCAMLKNRQGHQDVCAQAFQ 106
Db 64 GGGRVDSISGLVYVDGSPVNDVAESIELEGDKTYRI---TIKGGQFTD-----G 114

```
Qy 107 TPVHSFOAKPFERYFTTQVQV-AGNGSLAG---TVTGYBEPV--LKG-----DDR----- 150
Db 115 TPVTA-----ESFVNAMNVMANSTLSSYFFESILGYEGBVSEGLQVVDVDTTFVE 167
Qy 151 -RTAQARPI-YGTPDDPISVPLPAGLBSGKALVRIOTGKN---SGTIDNTGTHADL 205
Db 168 LTQPESDPFLRGSYSAFF---PLPE-----SAFDDMDAFGENPIGNGPYKLQENHNQDA 219
Qy 206 SRPFTARTTAIKGRFESRPLPHYRNRQINGGALDGGKAPILGYAEDPVELFFVHIOQSG 265
Db 220 TIVNADYTGROQNDGVKFIYPTPDSAVADLLSDNLVDLDAIPSAFSSFDELSGR 279
Qy 266 RLKTPSGKYIRIGYADKNEHPVVSIGRYMADKGYLK-----LGQTSMQGKIS- 312
Db 280 SINOPSVAVFQSTTIPESLEH-----PSGEGVLRQALSLAVNRDEITQTIFEGRTP 332
Qy 313 -----YMRQNPQRLAEVLQGNPSYIPFRELAGSSNDGPGVAGLTP 352
Db 333 ATDPTSPVIDGHSLOQADVLTYPDRAQLWAQDEI-----SP 373
Qy 353 LMGEYA---GAVDRHYI-----TLGA-----PLFVATAHPVTRKALNRLIMA 391
Db 374 WSGEFSYNDAGGQHWADATANSIRNTLIGDAIGNPYDPFKSLRDDVTRTIN----- 428
Qy 392 QDTGSAIDGAVR-----VDY-----FWG--YGDEAGELAG 419
Db 429 -----GAPRTGWQADYPSLGNFLGPLYGTGAGSNDG 459
```

RESULT 16

```
US-11-096-051-14
; Sequence 14, Application US/11096051
; Publication No. US20050244868A1
; GENERAL INFORMATION:
; APPLICANT: Kekuda, Rameesh
; APPLICANT: MacLachlan, Timothy K
; APPLICANT: Rastelli, Luca
; APPLICANT: Vernet, Corine
; APPLICANT: Ettenberg, Seth
; TITLE OF INVENTION: Ten-M3 Polypeptides and Polynucleotides and their Methods of Use
; FILE REFERENCE: Attorney Docket No. Cura 967
; CURRENT APPLICATION NUMBER: US/11/096,051
; CURRENT FILING DATE: 2005-03-30
; PRIOR APPLICATION NUMBER: 10/038,854
; PRIOR FILING DATE: 2001-12-31
; PRIOR APPLICATION NUMBER: 10/455,772
; PRIOR FILING DATE: 2003-06-04
; PRIOR APPLICATION NUMBER: 60/557,978
; PRIOR FILING DATE: 2004-03-30
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: CuraSeqList version 0.1
; SEQ ID NO 14
; LENGTH: 607
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-096-051-14
```

```
Query Match 3.5%; Score 81; DB 7; Length 607;
Best Local Similarity 19.4%; Pred. No. 15;
Matches 92; Conservative 50; Mismatches 137; Indels 196; Gaps 27;
```

```
Qy 81 LQSFRLGCANLKNRQGW---QDVCAQAFQTPVHSFOAKQFFER-----YFTPWQV 127
Db 47 LQS---SCQNPYCRGLPDQDIISQSLQSPSQ-AAKSFYDRISFLIGSDSTHVPGES 102
Qy 128 AGNSLAGTGTGYEYPVLKGDRTAQARFPYIGIPDDFISVPLPAGLRSGKALVRIRQT 187
Db 103 PFNKLASVIRG---QVLTADGT-----PLIGVNVSFHYF-----EYGYTITR 143
Qy 188 GKNSGTID--NTGCTHTADLSRFPITARTTAIKGRFEGSRFL-PYHT----- 231
Db 144 --QDGMFDLVANGG-----ASLTLV---FERSPFLTYHTWIPWNVFFYMDT 186
```

```
Qy 232 -----RNOINGGALDG---KAPILGYAEDPVELFF-----MHIOQSGRL 267
Db 187 LVKKKEENDIPSCDLSGFVRPNFI--VSSPLSTFFFRSSPEDSPIIPETQVLHEE----- 239
Qy 268 KTPSGKYIRIGYADKNEHPVVSIGRYMADKGYLKQTSMQGKISYMRQNPQRLAEVLGQ 327
Db 240 TTIPGTDLKLSTLSSRAAGYKSV-----LKI--TMTQSIIPFNLKMKVHLMVAVVGR 288
Qy 328 -----NPSYIRPRELAGSSNDGPVG---ALG-----TPLWGE 356
Db 289 LFOKNFPASPANLAYTFIWDKTDAYNQKYGSLSAVSVSGYEYESCLDLTLWEKRTAILQ 348
Qy 357 Y-----AGAVDRHYIT-----LGAPLFFVATAHPVT-----RKAL----- 385
Db 349 YELDASNMGGWTLDKHHVLDVQNGILYKNGENQFISQPPVVSIMNGRGRSRISCPSC 408
Qy 386 -----NRLIMAQDTGSAIDGAVRVDPYFWGYGDEAGELAGKQKTTGTVMQLLNG 434
Db 409 NGQADGNKLLAPVALACGIDGSLYVGDF-----NYVRIFFPSG 446
```

RESULT 17

```
US-11-096-051-4
; Sequence 4, Application US/11096051
; Publication No. US20050244868A1
; GENERAL INFORMATION:
; APPLICANT: Kekuda, Rameesh
; APPLICANT: MacLachlan, Timothy K
; APPLICANT: Rastelli, Luca
; APPLICANT: Vernet, Corine
; APPLICANT: Ettenberg, Seth
; TITLE OF INVENTION: Ten-M3 Polypeptides and Polynucleotides and their Methods of Use
; FILE REFERENCE: Attorney Docket No. Cura 967
; CURRENT APPLICATION NUMBER: US/11/096,051
; CURRENT FILING DATE: 2005-03-30
; PRIOR APPLICATION NUMBER: 10/038,854
; PRIOR FILING DATE: 2001-12-31
; PRIOR APPLICATION NUMBER: 10/455,772
; PRIOR FILING DATE: 2003-06-04
; PRIOR APPLICATION NUMBER: 60/557,978
; PRIOR FILING DATE: 2004-03-30
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: CuraSeqList version 0.1
; SEQ ID NO 4
; LENGTH: 2376
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-096-051-4
```

```
Query Match 3.5%; Score 81; DB 7; Length 2376;
Best Local Similarity 19.4%; Pred. No. 1e+02;
Matches 92; Conservative 50; Mismatches 137; Indels 196; Gaps 27;
```

```
Qy 81 LQSFRLGCANLKNRQGW---QDVCAQAFQTPVHSFOAKQFFER-----YFTPWQV 127
Db 472 LQS---SCQNPYCRGLPDQDIISQSLQSPSQ-AAKSFYDRISFLIGSDSTHVPGES 527
Qy 128 AGNSLAGTGTGYEYPVLKGDRTAQARFPYIGIPDDFISVPLPAGLRSGKALVRIRQT 187
Db 528 PFNKLASVIRG---QVLTADGT-----PLIGVNVSFHYF-----EYGYTITR 568
Qy 188 GKNSGTID--NTGCTHTADLSRFPITARTTAIKGRFEGSRFL-PYHT----- 231
Db 569 --QDGMFDLVANGG-----ASLTLV---FERSPFLTYHTWIPWNVFFYMDT 611
Qy 232 -----RNOINGGALDG---KAPILGYAEDPVELFF-----MHIOQSGRL 267
Db 612 LVKKKEENDIPSCDLSGFVRPNFI--VSSPLSTFFFRSSPEDSPIIPETQVLHEE----- 664
Qy 268 KTPSGKYIRIGYADKNEHPVVSIGRYMADKGYLKQTSMQGKISYMRQNPQRLAEVLGQ 327
Db 665 TTIPGTDLKLSTLSSRAAGYKSV-----LKI--TMTQSIIPFNLKMKVHLMVAVVGR 713
```

QY 328 -----NPSYIFFRRELSSNDGPVG-----ALG-----TPLMGE 356
Db 714 LFQKFPASPNIAYTFIWDKTDAYNQKVGLSEAVSVGYEYESCLDLTLWEKRTAILQG 773
QY 357 Y-----AGAVDRHYIT-----LGAPLFVATAHPVT-----RKAL----- 385
Db 774 YELDASNMGWTLDRKHVLDVQNGILYKNGENQFISQPPVSVSSIMGNRRRSISCPSC 833
QY 386 -----NRLMAQDTGSAIDGAVRDYFPGYDGEAGELAGKQKTTGYVWQLLPNG 434
Db 834 NQADGNKLLAPVALACGIDGSLYVGDF-----NYVRRIFPSG 871

RESULT 18
US-11-096-051-2
; Sequence 2, Application US/11096051
; Publication No. US20050244868A1
; GENERAL INFORMATION:
; APPLICANT: Kekuda, Ramesh
; APPLICANT: MacLachlan, Timothy K
; APPLICANT: Rastelli, Luca
; APPLICANT: Vernet, Corine
; APPLICANT: Ettenberg, Seth
; TITLE OF INVENTION: Ten-M3 Polypeptides and Polynucleotides and their Methods of Use
; FILE REFERENCE: Attorney Docket No. Cura 967
; CURRENT APPLICATION NUMBER: US/11/096,051
; CURRENT FILING DATE: 2005-03-30
; PRIOR APPLICATION NUMBER: 10/038,854
; PRIOR FILING DATE: 2001-12-31
; PRIOR APPLICATION NUMBER: 10/455,772
; PRIOR FILING DATE: 2003-06-04
; PRIOR APPLICATION NUMBER: 60/557,978
; PRIOR FILING DATE: 2004-03-30
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: CuraSeqList version 0.1
; SEQ ID NO 2
; LENGTH: 2715
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-096-051-2

Query Match 3.5%; Score 81; DB 7; Length 2715;
Best Local Similarity 19.4%; Pred. No. 1.2e+02;
Matches 92; Conservative 50; Mismatches 137; Indels 196; Gaps 27;

QY 81 LQSFRLGCANLKNRQGW---QDVCAQAFQTPVHSFOAKQFFER-----YFTPMQV 127
Db 811 LQS-----SQONQPCYCRGLPDQDIIISQSLQSPSQ--AAKSFYDRISFLIGSDSTHVLPGES 866
QY 128 AGNGLAGTVTYGYPEVLKGDRTAQAARFPIYGIPDDFISVPLPAGLRSGKALVRIQT 187
Db 867 PFNKLASVIRG---QVLTADGT-----PLIGNVVSFFHY-----EYGTITR----- 907
QY 188 GKNSTCIDNTGCTHADLSRFPITARTTAIKGFEGSRFL-PVHT----- 231
Db 908 ---QDGMFDLVANGG-----ASLTLV---FERSPPILTQYHTVWIPNVPVYMDT 950
QY 232 -----RNOINGGALDG---KAPILGYAEDPVELFF-----MHIQSGRL 267
Db 951 LVMKKEENDIPSCDLSGFVRPNPII--VSSPLSTFFRSPEDSPIIPETQVLHEE----- 1003
QY 268 TPKSKYIRIGYADKNEHPYVIGRYMADKGYLKGQTSMQGIKSYMQRNQPORLAELVQ 327
Db 1004 TTPGTDLKLSYLSRAAGYKSV-----LKI--TWTQSIIPFNLMKVLMAVAVGR 1052
QY 328 -----NPSYIFFRRELSSNDGPVG-----ALG-----TPLMGE 356
Db 1053 LFQKFPASPNIAYTFIWDKTDAYNQKVGLSEAVSVGYEYESCLDLTLWEKRTAILQG 1112
QY 357 Y-----AGAVDRHYIT-----LGAPLFVATAHPVT-----RKAL----- 385
Db 1113 YELDASNMGWTLDRKHVLDVQNGILYKNGENQFISQPPVSVSSIMGNRRRSISCPSC 1172

QY 386 -----NRLMAQDTGSAIDGAVRDYFPGYDGEAGELAGKQKTTGYVWQLLPNG 434
Db 1173 NQADGNKLLAPVALACGIDGSLYVGDF-----NYVRRIFPSG 1210

RESULT 19
US-11-113-424-51
; Sequence 51, Application US/11113424
; Publication No. US20050260713A1
; GENERAL INFORMATION:
; APPLICANT: Gangolli et al.
; TITLE OF INVENTION: Polypeptides and Nucleic Acids Encoding Same
; FILE REFERENCE: 21402-225
; CURRENT APPLICATION NUMBER: US/11/113,424
; CURRENT FILING DATE: 2005-04-21
; PRIOR APPLICATION NUMBER: 60/256,704
; PRIOR FILING DATE: 2000-12-19
; PRIOR APPLICATION NUMBER: 60/311,590
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: 60/257,314
; PRIOR FILING DATE: 2000-12-20
; PRIOR APPLICATION NUMBER: 60/311,613
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: 60/315,617
; PRIOR FILING DATE: 2001-08-29
; PRIOR APPLICATION NUMBER: 60/307,506
; PRIOR FILING DATE: 2001-07-24
; PRIOR APPLICATION NUMBER: 60/322,358
; PRIOR FILING DATE: 2001-09-14
; PRIOR APPLICATION NUMBER: 60/294,075
; PRIOR FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: 60/288,153
; PRIOR FILING DATE: 2001-05-02
; NUMBER OF SEQ ID NOS: 190
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 51
; LENGTH: 2715
; TYPE: PRT
; ORGANISM: Mus musculus
US-11-113-424-51

Query Match 3.5%; Score 81; DB 7; Length 2715;
Best Local Similarity 18.7%; Pred. No. 1.2e+02;
Matches 89; Conservative 49; Mismatches 140; Indels 198; Gaps 23;

QY 81 LQSFRLGCANLKNRQGW---QDVCAQAFQTPVHSFOAKQFFER-----YFTPMQV 127
Db 811 LQS-----SQONQPCYCRGLPDQDIIISQSLQSPSQ--AAKSFYDRISFLIGSDSTHVLPGES 866
QY 128 AGNGLAGTVTYGYPEVLKGDRTAQAARFPIYGIPDDFISVPLPAGLRSGKALVRIQT 187
Db 867 PFNKLASVIRG---QVLTADGT-----PLIGNVVSFLH----- 897
QY 188 GKNSTCIDNTGCTHADLSRFPITARTTAIKGFEGSRFL-PVHT----- 231
Db 898 ---YSEYTTITROGMPDLVANGASUTLVFERSPPILTQYHTVWIPNVPVYMDT 951
QY 232 -----RNOINGGALDG---KAPILGYAEDPVELFF-----MHIQSGRLK 268
Db 952 VMKKEENDIPSCDLSGFVRPNPII--VSSPLSTFFRSPEDSPIIPETQVLHEE-----T 1004
QY 269 TPKSKYIRIGYADKNEHPYVIGRYMADKGYLKGQTSMQGIKSYMQRNQPORLAELVQ 327
Db 1005 TTPGTDLKLSYLSRAAGYKSV-----LKI--TWTQAVIPFNLMKVLMAVAVGR 1053
QY 328 -----NPSYIFFRRELSSNDGPVG----- 347
Db 1054 FQKFPASPNIAYTFIWDKTDAYNQKVGLSEAVSVGYEYESCLDLTLWEKRTAVLQY 1113
QY 348 ALGTPLMGEYAGAVDRHYIT-----LGAPLFVATAHPVT-----RKAL----- 385
Db 1114 YELDASNMGW---TLDKHHVLDVQNGILYKNGENQFISQPPVSVSSIMGNRRRSISCPSC 1171


```

; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
US-10-793-626-2774

Query Match          3.3%; Score 77.5; DB 6; Length 400;
Best Local Similarity 20.6%; Pred. No. 17;
Matches 70; Conservative 37; Mismatches 116; Indels 117; Gaps 18;

QY  5 LFRALYGIAAALAAACOS-----KSIOTFPQDTSVINGPDRPVGIPDPAGTIVGGGAV 60
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  117 ILRAVIEGTVRLVKKFTDDMLTKIYPIHSLV--PQTLKWLMD-AGLT-----166

QY  61 YTVVPHLSLPHWAADPAKSLQSFRLGCANLKNRQGMQDVCAQAFQTPVH-SPOAKQFFE 119
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  167 -----QPF--SLEKILGGAKLSPQLIEQ---ALTYRLPVYNSFGMTETCS 207

QY  120 RYFTPWQVAGNSLAGTVGYEYPVLKGDRTAQARPPYIGIPDDFISVPL--PAGLRS 177
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  208 QFLTA-----SPQMLKERFDTVGKPSENVKIKNPNAVGH 243

QY  178 GKALVRIRQTGN-----SGTIDNTGGTHTADLSRFPITARTTAIKGRFE---222
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  244 GELLIK-----GENVWGYLYPKYKLDYFDNDGYFQTDIAIDDEGYVVIYDRRKLIIS 299

QY  223 -GSRPLPYHTRNQINGGALD-----GKAPILGYAEDP-----VELF 257
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  300 GGENIYYP---QIETIAKDFEGIEDAVCVGISDDTWGQVPILYVYVTTQDINQTELIEHF 355

QY  258 FWHIQGSRLLKTPSGKYIRIGYADKNEHPYVSGRYMADK 297
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  356 ENHL---ARYKIPK-KYQV-----KSLPYTSTGKLQRKK 386

RESULT 28
US-10-858-730-104
; Sequence 104, Application US/10858730
; Publication No. US20050255568A1
; GENERAL INFORMATION:
; APPLICANT: Bailey, Richard B.
; APPLICANT: Blomquist, Paul
; APPLICANT: Doten, Reed
; APPLICANT: Driggers, Edward M.
; APPLICANT: Madden, Kevin T.
; APPLICANT: O'Leary, Jessica
; APPLICANT: O'Toole, George
; APPLICANT: Trueheart, Joshua
; APPLICANT: Walbridge, Michael J.
; APPLICANT: Yorgey, Peter S.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR AMINO ACID
; FILE REFERENCE: 14184-030001
; CURRENT FILING DATE: 2004-06-01
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: US 60/475,000
; NUMBER OF SEQ ID NOS: 364
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 529
; TYPE: PRT
; ORGANISM: Mycobacterium tuberculosis
US-10-858-730-104

Query Match          3.3%; Score 77.5; DB 6; Length 529;
Best Local Similarity 22.2%; Pred. No. 26;
Matches 92; Conservative 35; Mismatches 151; Indels 137; Gaps 20;

QY  56 GGGAV-----YTVVPHLSLPHWAADPAKSLQSFRLGCANLKNRQGMQDVCAQAFQ 106
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  135 GGVAVDQAHEAMDDELTERPH--PYRWLA---TAGAAGFALGVAMLG--GTWLTCLVLA 188

QY  107 TP-----VHSFOAKQFFERYF-----TPMQVAGN-----130
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  189 TSGVIDRLGRLLNRIGTLPFFQRFVFGAGIATLVAAAYLIAGQDPTALVATGIVVLLSGM 248

QY  131 ---GSLAGTVGYEYPVLKGDRTAQARPPYIGIPDDFISVPLPAGLRSKALVRIRQT 187
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  249 TLVGSMDQAVTGYMLTAL-----ARLGDALF-----LTAGIVVG-ILISLR--288

QY  188 GKNSGTIDNTGGTHTADLSRFPITARTT-AIKGRFEGSRPLPYHTRNQINGGALDGKA-P 245
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  289 -----GVTNAGIQIELHVDATTTLATPG-----MPLPILVAVSAAALSGVCLT 331

QY  246 ILGYAEDPVELFFMHIOGSGRLKTPSGKYIRIGYADKNEHPYVSGRYMADKGYLKLQGT 305
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  332 IASVAP-----LRSVATAGLSAGLAE-----LVLIGLGNAAGFGRVATWT 371

QY  306 SMOGIK-----SYMRQNPQRLAEVLGNPSY-----IFFRELAGSSNDGPVG-----347
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  372 AAIQGVGFATLISIRROQAPALVTATAGIMPMLPGLAVFRAVFAFVNDTPDGGTLQLEA 431

QY  348 ----ALGT-PLMGEYAGVDRHYITLGAFLVATAHPVTRKALNRLIMADTGS 396
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  432 AATLALGSGVVLGFELASPLRYGAGRIGDLFRIEGPPGLRRAVGRVRLQPAKS 486

RESULT 29
US-10-858-730-105
; Sequence 105, Application US/10858730
; Publication No. US20050255568A1
; GENERAL INFORMATION:
; APPLICANT: Bailey, Richard B.
; APPLICANT: Blomquist, Paul
; APPLICANT: Doten, Reed
; APPLICANT: Driggers, Edward M.
; APPLICANT: Madden, Kevin T.
; APPLICANT: O'Leary, Jessica
; APPLICANT: O'Toole, George
; APPLICANT: Trueheart, Joshua
; APPLICANT: Walbridge, Michael J.
; APPLICANT: Yorgey, Peter S.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR AMINO ACID
; FILE REFERENCE: 14184-030001
; CURRENT FILING DATE: 2004-06-01
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: US 60/475,000
; NUMBER OF SEQ ID NOS: 364
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 105
; LENGTH: 529
; TYPE: PRT
; ORGANISM: Mycobacterium tuberculosis
US-10-858-730-105

Query Match          3.3%; Score 77.5; DB 6; Length 529;
Best Local Similarity 22.2%; Pred. No. 26;
Matches 92; Conservative 35; Mismatches 151; Indels 137; Gaps 20;

QY  56 GGGAV-----YTVVPHLSLPHWAADPAKSLQSFRLGCANLKNRQGMQDVCAQAFQ 106
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  135 GGVAVDQAHEAMDDELTERPH--PYRWLA---TAGAAGFALGVAMLG--GTWLTCLVLA 188

QY  107 TP-----VHSFOAKQFFERYF-----TPMQVAGN-----130
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:
Db  189 TSGVIDRLGRLLNRIGTLPFFQRFVFGAGIATLVAAAYLIAGQDPTALVATGIVVLLSGM 248

QY  131 ---GSLAGTVGYEYPVLKGDRTAQARPPYIGIPDDFISVPLPAGLRSKALVRIRQT 187
    |||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:||||:

```

Job time : 12 secs

```
Db      249 TLVSMQDAVTGYMLTAL-----ARLGDALF-----LTAGIVVG--ILISLR-- 288
Qy      188 GKNSGTIDNTGGTHTADLSRPPITARTT-AIKGRFEGSRFLPYHTRNQINGALDGKA-P 245
Db      289 -----GVTNAGIQIELHVDATTTLATPG-----MPLFILVAVSGAALSGVCLT 331
Qy      246 ILGVAEDPVELFFMHIOQSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMDKGYLKLQOT 305
Db      332 IASYAP-----LRSVATAGLSAGLAE-----LVLIGLGAAGFGRVWATWT 371
Qy      306 SMQGIK-----SYMRNQPQELAEVLQONPSY-----IFFRELAGSSNDGPVG----- 347
Db      372 AAIQGVFLATLISIRROQAPALVTATAGIMPLPGLAVFRAVFAVNDTPDGGILTQLLEA 431
Qy      348 -----ALGT-PLMGEYAGAVDRHYITLGAPLFVATAHPVTRKALNRLIMAQDTGS 396
Db      432 AATALAGSGVVGVEFLASPLRYCAGRIGDLFRIEGPGLRRVGRVRLQPAKS 486
```

```
RESULT 30
US-10-821-234-1262
; Sequence 1262, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
; APPLICANT: Stache-Crain, Birgit
; APPLICANT: Andarmani, Susan
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821,234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: pc_seq_genes Version 1.0
; SEQ ID NO 1262
; LENGTH: 2657
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-821-234-1262
```

```
Query Match      3.3%; Score 77.5; DB 6; Length 2657;
Best Local Similarity 20.1%; Pred. No. 2.4e+02;
Matches 71; Conservative 39; Mismatches 101; Indels 143; Gaps 17;

Qy      135 GTVTGYEPEVLKG-----DDRTAQARFPYIGIPDDFI--- 167
Db      1929 GTCTVTYLTLPGDYSILVKYNDKHIFGSPPTAKITDSDRCQVKL---GSAADFLLDI 1985
Qy      168 -----SVPLPAGLRSGKALVRI-----ROTKNSGTIDNTGGTHTADLS 206
Db      1986 SETDLSLTASIKAPSGRDEPCLKRLPNHHIGISFIPREVGELHLSI-KKNGNHVAN-- 2042
Qy      207 RFPIT-----ARTTAIKGR-----FEGSRFLPYHTRNQING--ALDGKAPI 246
Db      2043 -SPVSIWVQSEIGDARRAKYVGRGLSEGRTFEMSDFI-VDTRDAGYGGISLAVEGPSKV 2100
Qy      247 LGYAE-----PVELPFMHIOQSGRLKTPSGKYIRI 277
Db      2101 DIQTEDLEDGCKVSYFPTVGVVIVSTKFADEHVPGPSPTVKISGEGRVKESITRTSRA 2160
Qy      278 GYADKNEHPYVSIGRYMDKGYLQGTSMQGIKSYMRNQNPQRLAEV---LGONPSYIF 333
Db      2161 -----PSVATVGSICDLN-LKIPINSDMSAHVTSPSGRVTEAEIVPMGKNKSHCVR 2211
Qy      334 F-----RELAGSNDGPFVAGLGTPLMGYAGAVDRHYITLGA 371
Db      2212 FVPOEMGVHTVSVKYGQHVTSPPFTVGPGLGE-----GGA---HKVRAGGP 2256
```

Search completed: December 30, 2005, 08:28:54

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 30, 2005, 08:25:13 ; Search time 8 Seconds
(without alignments)
412.820 Million cell updates/sec

Title: US-09-914-454B-31
Perfect score: 2340
Sequence: 1 MKKYLFRALYGIAAAILAA.....KTTGYVWQLPNGMKPEYRP 441

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 57103 seqs, 7488799 residues

Total number of hits satisfying chosen parameters: 57103

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA New:*

1: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pdb.*
2: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pdb.*
3: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pdb.*
4: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pdb.*
5: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pdb.*
6: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pdb.*
7: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pdb.*
8: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pdb.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2257	96.5	468	6	US-10-467-657-776
2	94	4.0	503	6	US-10-793-626-1810
3	94	4.0	576	6	US-10-512-184-65
4	94	4.0	625	6	US-10-512-184-47
5	92	3.9	473	6	US-10-467-657-8108
6	90.5	3.9	1389	6	US-10-467-657-334
7	89.5	3.8	7102	7	US-11-143-980-48
8	86	3.7	1572	6	US-10-793-626-2906
9	85	3.6	808	7	US-11-110-082-38
10	83.5	3.6	331	6	US-10-878-556A-45
11	83.5	3.6	569	6	US-10-512-184-66
12	83.5	3.6	618	6	US-10-512-184-48
13	83	3.5	910	6	US-10-131-826A-112
14	81.5	3.5	409	7	US-11-055-822-290
15	81	3.5	534	7	US-11-082-389-348
16	81	3.5	607	7	US-11-096-051-14
17	81	3.5	2376	7	US-11-096-051-4
18	81	3.5	2715	7	US-11-096-051-2
19	81	3.5	2715	7	US-11-113-424-51
20	81	3.5	2721	7	US-11-096-051-10
21	81	3.5	2725	7	US-11-096-051-8
22	79.5	3.4	1565	6	US-10-467-657-2704
23	78	3.3	392	6	US-10-467-657-1784
24	78	3.3	520	6	US-10-131-826A-144
25	78	3.3	1394	6	US-10-467-657-7930

26	78	3.3	5712	7	US-11-143-980-47	Sequence 47, Appl
27	77.5	3.3	400	6	US-10-793-626-2774	Sequence 2774, Ap
28	77.5	3.3	529	6	US-10-858-730-104	Sequence 104, App
29	77.5	3.3	529	6	US-10-858-730-105	Sequence 105, App
30	77.5	3.3	2657	6	US-10-821-234-1262	Sequence 1262, Ap
31	76.5	3.3	287	6	US-10-467-657-5866	Sequence 5866, Ap
32	76.5	3.3	745	6	US-10-131-826A-68	Sequence 68, Appl
33	76.5	3.3	745	7	US-11-135-855-37	Sequence 37, Appl
34	76	3.2	372	6	US-10-793-626-1632	Sequence 1632, Ap
35	76	3.2	1006	6	US-10-467-657-8400	Sequence 8400, Ap
36	76	3.2	1263	6	US-10-485-517-127	Sequence 127, App
37	76	3.2	1394	7	US-11-115-639-52	Sequence 52, Appl
38	76	3.2	1394	7	US-11-115-639-53	Sequence 53, Appl
39	76	3.2	1394	7	US-11-115-639-54	Sequence 54, Appl
40	76	3.2	1394	7	US-11-115-639-55	Sequence 55, Appl
41	75.5	3.2	219	7	US-11-170-653-29	Sequence 29, Appl
42	75.5	3.2	405	6	US-10-467-657-2310	Sequence 2310, Ap
43	75.5	3.2	423	7	US-11-055-822-258	Sequence 258, App
44	75.5	3.2	457	6	US-10-467-657-5134	Sequence 5134, Ap
45	75.5	3.2	782	6	US-10-821-234-1592	Sequence 1592, Ap

ALIGNMENTS

RESULT 1
US-10-467-657-776
; Sequence 776, Application US/10467657
; Publication No. US20050260581A1
; GENERAL INFORMATION:
; APPLICANT: CHIRON SpA
; APPLICANT: FONTANA Maria Rita
; APPLICANT: PIZZA Mariagrazia
; APPLICANT: MASNANI Vega
; APPLICANT: MONACI Elisabetta
; TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/467,657
; CURRENT FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: GB-0103424.8
; PRIOR FILING DATE: 2001-02-12
; NUMBER OF SEQ ID NOS: 9218
; SOFTWARE: SeqWin99, version 1.04
; SEQ ID NO 776
; LENGTH: 468
; TYPE: PRT
; ORGANISM: Neisseria gonorrhoeae
US-10-467-657-776

Query Match	96.5%	Score 2257	DB 6	Length 468
Best Local Similarity	95.7%	Pred. No. 2.3e-190		
Matches 422	Conservative	9	Mismatches 10	Indels 0
Gaps	0			
QY	1	MKKYLFRALYGIAAAILAACQSKIQTFFPDPTSVINGPDRPVGIPDPAGTTVGGGAV	60	
Db	28	MKKHLLSALYGIAAAILAACQSKIQTFFPDPTSVINGPDRPVGIPDPAGTTVGGGAV	87	
QY	61	YTVVPHLSLPHWAQDFAKSLQSRFLGCANLKNRQGMQDVCAQAFQTPVHSFOAKQFFER	120	
Db	88	YTVVPHLSLPHWAQDFAKSLQSRFLGCANLKNRQGMQDVCAQAFQTPVHSFOAKQFFER	147	
QY	121	YFTPWVAGNSLAGTGTGGTGTADLRPTTARTTAIKRFEGRSFLPYHTRNQINGAL	240	
Db	181	LVRIRQTGKNSGTTDNTGGTGTADLRPTTARTTAIKRFEGRSFLPYHTRNQINGAL	267	
QY	208	LVRIRQTGKNSGTTDNTGGTGTADLRPTTARTTAIKRFEGRSFLPYHTRNQINGAL	300	
Db	241	DGKAPILGYADBPVELPFMHIIQSGRLKTPSGKYIRIGYADKNEHPYISIGRYMADKGYL	327	
QY	268	DGKAPILGYADBPVELPFMHIIQSGRLKTPSGKYIRIGYADKNEHPYISIGRYMADKGYL	327	

```
QY 301 KLGQTSMQGKSYMRQNPORLAELVILQNPSPYIFFRELAGSSNDGPGVAGLGTPLMGEYAGA 360
Db 328 KLGQTSMQGKSYMRQNPORLAELVILQNPSPYIFFRELAGSGNEGPVAGLGTPLMGEYAGA 387
QY 361 VDRHYITLGLAPLFVATAHPVTRKALNRLNMAQDTGSAIDGAVRVDPYFWGYGDSBAGELAGK 420
Db 388 IDRHYYITLGLAPLFVATAHPVTRKALNRLNMAQDTGSAIKGAVRVDPYFWGYGDSBAGELAGK 447
QY 421 QKTTGYVWQLLPNGMKPEYRP 441
Db 448 QKTTGYVWQLLPNGMKPEYRP 468

RESULT 2
US-10-793-626-1810
; Sequence 1810, Application US/10793626
; Publication No. US2005025478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; PRIOR FILING DATE: 2004-03-04
; PRIOR APPLICATION NUMBER: 60/164,258
; NUMBER OF SEQ ID NOS: 11-09
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1810
; LENGTH: 503
; TYPE: PRT
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-10-793-626-1810

Query Match 4.0%; Score 94; DB 6; Length 503;
Best Local Similarity 20.2%; Pred. No. 0.85;
Matches 76; Conservative 47; Mismatches 128; Indels 126; Gaps 17;

QY 137 VTGYEPLVKGDD--RRTAQ--ARPPV-----YGIPTD-----YGIPDD----- 165
Db 75 ILGPEEISGDEVKRTGRIMEVPVGEEMIGRVVNPGLQPIDGQPINATKTRPVEKKAT 134
QY 166 -----FISVPLPAGLSGKALVRI-----RQTKNSGTIDNTGTHAD--LS 206
Db 135 GVMDRKSVDPLQGIKADALVPIGRGORELIIGDRTKTTVAIDSIILNQKDQDTICI 194
QY 207 RFPITARTTAIKGRFEGSRFLPYHTRNQINGGALDGKAPILGVAEDDPVELFFMHIOGS-- 264
Db 195 YVAILGQKDSVTRANVEKLR-----QAGALDYTIIVVSASAADPAPLLYIAPYSGVT 244
QY 265 -GRKTPSGKYIRIGYADKNEHPVSTIGRYMADKGYLKLQTSMQGKSYMRQNPORLAE 323
Db 245 MGBEFMFENGKHLVITYDD-----LTKQAAAYRELSLLRLRPPGREA- 285
QY 324 VLQONPSYIFF-----RELAGSSND---GPVAGLGTPLMGEYAGVDRH----- 364
Db 286 -----YPGDVFYHLRLLERAAKUNDDIGGGSITAL--PIIETQAGDISAYVPTNVISITD 339
QY 365 -YITLGLAPLFVATAHPVTRKALNRLNMAQDTGSA-----IDGAVRVDPY-----FW 408
Db 340 GQIFLQSDLPFGSVRPAINAQOS---VSRVGSQAQIKMKKVAGTLRLDLASYLEBSFA 396
QY 409 GYGDEAGELAGKQKTTG 425
Db 397 QFGSDLDEFTAKKLARG 413

RESULT 3
US-10-512-184-65
; Sequence 65, Application US/10512184
; Publication No. US20050244901A1
```

```
; GENERAL INFORMATION:
; APPLICANT: Fraunhofer Gesellschaft zur Forderung der angewandten Forschung e.V.
; TITLE OF INVENTION: Antibodies, recombinant antibodies, recombinant
; TITLE OF INVENTION: antibody fragments and fusions mediated plant disease
; FILE REFERENCE: 3581.01US01
; CURRENT APPLICATION NUMBER: US/10/512,184
; CURRENT FILING DATE: 2004-10-22
; NUMBER OF SEQ ID NOS: 72
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 65
; LENGTH: 576
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: precursor
; OTHER INFORMATION: fusion protein comprising chitinase - linker -
; OTHER INFORMATION: scfv CWP2D.
US-10-512-184-65

Query Match 4.0%; Score 94; DB 6; Length 576;
Best Local Similarity 19.8%; Pred. No. 1;
Matches 102; Conservative 50; Mismatches 156; Indels 206; Gaps 26;

QY 21 CQSKSIQTFFQPDTSVINGDPDPVGPDPAGTTVGGGAVYT-----VVPHLISLPHWAA 74
Db 36 CQSQ-----CNGCSGGGTPVPVPTPG---GGVSSIIISQSLPQMLLHRNDAACQA 83
QY 75 QDF-----AKSIQSF-RLGCANLKNRQ-----GM----- 97
Db 84 KGFYNYGAFVAAANSFSGFATTGCADVDRKREVAFLAQTSHETTGWPTAPDGPYSWGYC 143
QY 98 -----QDVCAQAQTPVHSFOAQKQFFERYTPQVAGN-----GSLAGT----- 136
Db 144 FNOERGAASDYCSPNSQWP--CAPGKKYFGR--GPIQISYNYNGPAGRAIGTDLNLPD 199
QY 137 -----VTGYEPLVKGDDRRRTAQARFFIYGIPDDF 166
Db 200 LVATDATVSPKTALEWFMWTPQSPKPSHSDVITGRWSP--SGADQ--NAGRVPGYVITNI 255
QY 167 ISVPLPAGLSGKALVRIQRTKNSGTIDNTGTHADLSRFPITARTTAIKGRFEGSRF 226
Db 256 IN---GGLGCGR-----GQDGRVADRIG-----FYKRYCDLLGSYGDNL 292
QY 227 LPYHTRN-QINGGALDGKAPILGVAEDDPVELFFMHIOGSGLKTPSGKYIRIGYADKNEH 285
Db 293 DCYNQRPFAVDGGGGGGG---GSAAPQAMAAVTLDESGGLQTPGG----- 336
QY 286 PYVSIQRYMADKGYLKLQTSMQGKSYMRQNPORLAELVILQNPSPYIFFRELAGSSNDGP 345
Db 337 -----GLSLVCKG--SGPDFSSDTMMWVRQAPGKGLEF-----VAGISGDGS 376
QY 346 VGALGTPLMGEYAGVDRHYITLGLAPLFVATAHPVTRKALNRLNMAQDTGS----- 396
Db 377 DTNYGSAVKGRATISRDNQGSTV-----RLQLNNL-RAEDTATYCTRGPCS 422
QY 397 -----AIDGAVRVDPYFWGYGDEAGELAGKQKTTG 425
Db 423 PTKNCRAD---RID-AWGHGTEVTVSSGSTSGSG 452

RESULT 4
US-10-512-184-47
; Sequence 47, Application US/10512184
; Publication No. US20050244901A1
; GENERAL INFORMATION:
; APPLICANT: Fraunhofer Gesellschaft zur Forderung der angewandten Forschung e.V.
; TITLE OF INVENTION: Antibodies, recombinant antibodies, recombinant
; TITLE OF INVENTION: antibody fragments and fusions mediated plant disease
; TITLE OF INVENTION: resistance against fungi
; FILE REFERENCE: 3581.01US01
; CURRENT APPLICATION NUMBER: US/10/512,184
; CURRENT FILING DATE: 2004-10-22
```

```
; NUMBER OF SEQ ID NOS: 72
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 47
; LENGTH: 625
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: fusion protein
; OTHER INFORMATION: comprising the leader peptide - chitinase - linker
; OTHER INFORMATION: - scFv CWP2 - cmc/His6.
US-10-512-184-47

Query Match          4.0%; Score 94; DB 6; Length 625;
Best Local Similarity 19.8%; Pred. No. 1.2;
Matches 102; Conservative 50; Mismatches 156; Indels 206; Gaps 26;

QY 21 CQSKIQTFFQPDTSVINGPRPVGIPDPAGTIVGGGAVYT-----VPHLSLPHWAA 74
Db 59 CQSQ-----CNGCSGGTVPVPTPTG---GGVSSIISQSLFDQMLLRNDAAQA 106
QY 75 QDF-----AKSLQSF-RLGCANLKNRQ-----GW-----97
Db 107 KGFYNYGAFVAAANSFSGFATTTGGADVRKREVAFLAQTSHETTGGWPTAPDGPYSWGYC 166
QY 98 -----QDVCAQAQFQPVISFQAKQFFERYFTFWQVAGN-----GSLAGT-----136
Db 167 FNERGAASDYCSPNSOWP--CAPGKYFGR--GPIQISYNYNYPGAPGAGTGTDLNNPD 222
QY 137 -----VTGYEPEVLKGGDRRTAQARPIVGIPIPDF 166
Db 223 LVATDATVSFKTALMFWMTPOS PKSSHVDVITGRWSP--SGAQ--AAGRVPYGVITNI 278
QY 167 ISVPLPAGLRSGKALVRIQTKNSGTIDNTGGTHTADLSRPPITARTAIKRGPEGSRF 226
Db 279 IN-----GGLEGR-----GDGRVADRIG-----FYKRYCDLLGVSYGDNL 315
QY 227 LPYHTRN-QINGGALDGKAPILGYAEDPVELFFMHIOGSGRLKTPSGKYIRIGYADKNEH 285
Db 316 DCYNQRPFVADGGGGSGG--GSAQAQPAAMAATLDES GGGIQTGG-----359
QY 286 PVSITGRYMADKYLKLGTSMQGKSYMRQNPORLAELVGNPSYIFRELAGSSNDGP 345
Db 360 -----GLSLVCKG-----SGDFSSDTMMVRQAPGKLEF-----VAGISGDGS 399
QY 346 VGALGTPLMGEYAGAVDRHYITLGAFLFVATAHPVTRKALNRLIMAQDTGS-----396
Db 400 DNYGSAVKGRATISRDNQSTV-----RLQLNKL-RAEDTATYCTRGPCS 445
QY 397 -----AIDGAVRVDFWGYGDEAGELAGKQKTTG 425
Db 446 PTKNCAAD---RID-AWGHGTEVTVSSGSTSGSG 475

RESULT 5
US-10-467-657-8108
; Sequence 8108, Application US/10467657
; Publication No. US20050260581A1
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; APPLICANT: FONTANA Maria Rita
; APPLICANT: PIZZA Mariagrazia
; APPLICANT: MASIGNANI Vega
; APPLICANT: MONACI Elisabetta
; TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/467,657
; PRIOR FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: GB-0103424.8
; PRIOR FILING DATE: 2001-02-12
; NUMBER OF SEQ ID NOS: 9218
; SOFTWARE: SeqWin99, version 1.04
; SEQ ID NO 8108
; LENGTH: 473
; TYPE: PRT
; ORGANISM: Neisseria gonorrhoeae
US-10-467-657-8108

Query Match          3.9%; Score 90.5; DB 6; Length 1389;
Best Local Similarity 20.4%; Pred. No. 7.1;
Matches 106; Conservative 51; Mismatches 179; Indels 183; Gaps 25;

QY 39 GPDPRPV-----GIPDPAGTIVGGGAVTVVPHLS-----68
Db 645 GTSRPMRADIKGGRLSLSGGA VVDVDTAGLTGEGTAQHRIETHAAMTLDGKPFKLDLAS 704
QY 69 -----LPHWAAQDPAKSLQSFRLGCA---NLKNRQ-----QWQDVCAQA---FQTPVHSFQ 113
Db 705 GGINRELTRWKG-----SIGILDIGGAFNLKLNRTLEAGAEHVAASAANKQAMGGSILN 759
QY 114 AKQFFERYFTPWQ-----VAGNGSLAG---TVTGYEP-----VLKGD-----148
Db 760 LQHF-----SWDRKTGISAKGGARGLHIALHNFPPFPFHEHNLVINGDWDVAYGHNARG 813
QY 149 ----DRRTAQARFP---IYGI-----PDDFISVPLPAGLRSGKALVRIQTKNSG 192
Db 814 YLNISROSGDAVLPGGQALGLNAFSLKTRFQNDRI GILLDCGARFGRINADLIGNAPGG 873

; TYPE: PRT
; ORGANISM: Neisseria gonorrhoeae
US-10-467-657-8108

Query Match          3.9%; Score 92; DB 6; Length 473;
Best Local Similarity 20.7%; Pred. No. 1.2;
Matches 56; Conservative 42; Mismatches 90; Indels 82; Gaps 13;

QY 223 GSRLPYHTRNQINGGALDGKAPILGYAEDPVELFFMHIOGSGRLKTPSGKYIRIGYADK 282
Db 31 GPRVTSYPTADRFHDGPREGE-----YIKVLHLRGMGALNKLPSLYIHIPFCNT 79
QY 283 NEHPYVSIGRYMA-DKG-----YKLKGQTSMQGKSYMRQNPORLAELV---GNPSYI---332
Db 80 ICY-YCGCNKIITDKSRADTYIIEYLEKEMELLAPHLNQRHQ-LAQLHFGGGTPTFLSDE 137
QY 333 ----FFR-----ELAGSSNDGPVCGALGTPLMGEYAGAVDRHYITLGAFLP-----373
Db 138 QIERVFRMIRKHFELIPS-----GEYSIEDPRKVSRTVLMGLRGLGRNRM 183
QY 374 ---VATAHPVTRKALNRLIMAQDTGSAIDGA-----VRVDYFWGYGDEAGELAGKQKT 423
Db 184 SVGIQDPEPKVQAAVNRIQSVEETKEVIDAAREAGFKSVSDLIYGLPHQTSSE---SIKT 240
QY 424 T-----GYVWQLLPNGMKPEYR 440
Db 241 TIDTVLSLDPDLALYHYAHLPHVFKPQRR 270

RESULT 6
US-10-467-657-334
; Sequence 334, Application US/10467657
; Publication No. US20050260581A1
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; APPLICANT: FONTANA Maria Rita
; APPLICANT: PIZZA Mariagrazia
; APPLICANT: MASIGNANI Vega
; APPLICANT: MONACI Elisabetta
; TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/467,657
; CURRENT FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: GB-0103424.8
; PRIOR FILING DATE: 2001-02-12
; NUMBER OF SEQ ID NOS: 9218
; SOFTWARE: SeqWin99, version 1.04
; SEQ ID NO 334
; LENGTH: 1389
; TYPE: PRT
; ORGANISM: Neisseria gonorrhoeae
US-10-467-657-334
```


196	SVPVWGMNVAAGVSLKTLHPDLGTDKDKQEQVHKQWVESAYEVIKLKG-----YTSW- 249
127	VAGNGSLAGTGTGYEYVPLKGGDRRTAQAARFPI---YGIPDD-FISVPLPAGLRSRSGKALV 182
250	-----AIGLSVADLAESIMK-NLRVRPVTMTKGLYGIKDDVLSVFCILGQNGISDLV 303
183	RIROTKNGNSGTIDNTGGT 200
304	KVTLTSEEARLKKSADT 321
RESULT 11	
US-10-512-184-66	
Query Match 3.6%; Score 85; DB 7; Length 808;	
Best Local Similarity 21.1%; Pred. No. 10;	
Matches 87; Conservative 54; Mismatches 166; Indels 106; Gaps 23;	
GENERAL INFORMATION:	
; APPLICANT: Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V.	
; TITLE OF INVENTION: Antibodies, recombinant antibodies, recombinant	
; TITLE OF INVENTION: antibody fragments and fusions mediated plant disease	
; TITLE OF INVENTION: resistance against fungi	
; FILE REFERENCE: 3581.01US01	
; CURRENT APPLICATION NUMBER: US/10/512.184	
; CURRENT FILING DATE: 2004-10-22	
; NUMBER OF SEQ ID NOS: 72	
; SOFTWARE: PatentIn Ver. 2.1	
; SEQ ID NO 66	
; LENGTH: 569	
; TYPE: PRT	
; ORGANISM: Artificial Sequence	
; FEATURE:	
; OTHER INFORMATION: Description of Artificial Sequence: precursor	
; OTHER INFORMATION: fusion protein comprising chitinase - linker -	
; OTHER INFORMATION: scFv V2.	
US-10-512-184-66	
21	COSKSIOTFPQDTSVINGDRPVGIPDPAGTIVGGGAVYT-----VVPHLSLPHWAA 74
36	COSQ-----CNGCGGGGTPVPVPTTG---GGVSSIISLSLFDQMLLHRNDAACQA 83
75	QDF-----AKSLOSF-RLGCANLKNRQ-----GW----- 97
84	KGFNYGAFVAAANSFSGFATTTGGADVRKREVAFLAQTSHETGGTPADGPGYSWGYC 143
98	-----QDYCAQAFQTPVHSFOAKOFFERYFTPMQVAGN-----GSLAGT----- 136
144	FNQERGAASDYCSNQPW---CAPGKYGFR---GPIQISYNYVGPAGRAIGTDLNLPD 199
137	-----VTGYEYVPLKGGDRRTAQAARFPIYIPDDF 166
200	LVATDATVSEKTALEWMTQSPKPSHVDITGRWSP--SGADQ--AAGRPVGGYVITNI 255
167	ISVPLPAGLRSRSGKALVRIROTKNGNSGTIDNTGGTHTADLSRFTTARTTAIKGRFEGSRF 226
256	IN-----CGLECCR-----GQGRVADRIQ-----FYKRYCDLLGVSYGDNIL 282
227	LPYHTRN-QINGGALDGKAPILGYAEDPVELFFMHIOGSLRKLTPSGKYIRIG----- 278
293	DCYNQRPFAVDGGGGSGG---GSAAQAPAMAQIQVQSGPELKKP-GETVKISCKVSGDN 348
279	-----YADKNEHPVSVISGRYVADKGYLKLGGTSM 307
349	FTNYGMQVWKOAPGKGLKMWGWINTYTGATYADDSKGRFAFSLTSASTAYLQINLKN 408
308	QGIKSYMRQNPQRLAEVLGONPSYIFFRELAGSSNDGPVAGLGTPLMGEYAGAVDRHYIT 367
409	EDTATYF-----CARFLG-NPYIVM--DYWGQGTSTVTSAGGGGGGGGGSDVLM 459
368	LGAPL 372


```
Db 736 -----GYSLEGAMLTCTYSRDTGTP-----KMSDRVPCALKYEPCLNPGVPENGQ 782
Qy 281 DKNEHPYVIG--RYMADKGYLKLQGTSMOIKSYMRQ-----NPKRLAE 323
Db 783 TLYKHY--QAGESLRFCCFQFELIGEVTITCVPGHPGQWTSQBPPLCKVQTITDPSRQLE 841
Qy 324 -----VLQNPSPYIFFRELAGSSNDGPVGA 348
Db 842 GGNLALAILPLGLVILVILSG--VYIYTKLQKSLFSGFS 881

RESULT 14
US-11-055-822-290
; Sequence 290, Application US/11055822
; Publication No. US20050260707A1
; GENERAL INFORMATION:
; APPLICANT: Pompejus, Markus
; APPLICANT: Kröger, Burkhard
; APPLICANT: Schröder, Hartwig
; APPLICANT: Zelder, Oskar
; APPLICANT: Haberhauer, Gregor
; TITLE OF INVENTION: CORYNEBACTERIUM GLUTAMICUM GENES ENCODING
; FILE REFERENCE: BGI-121CPCN
; CURRENT APPLICATION NUMBER: US/11/055,822
; CURRENT FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 09/606,740
; PRIOR FILING DATE: 2000-06-23
; PRIOR APPLICATION NUMBER: 60/141,031
; PRIOR FILING DATE: 1999-06-25
; PRIOR APPLICATION NUMBER: 60/142,101
; PRIOR FILING DATE: 1999-07-02
; PRIOR APPLICATION NUMBER: 60/148,613
; PRIOR FILING DATE: 1999-08-12
; PRIOR APPLICATION NUMBER: 60/187,970
; PRIOR FILING DATE: 2000-03-09
; PRIOR APPLICATION NUMBER: DE 19930476.9
; PRIOR FILING DATE: 1999-07-01
; PRIOR APPLICATION NUMBER: DE 19931415.2
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931418.7
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931419.5
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931420.9
; PRIOR FILING DATE: 1999-07-08
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1158
; SEQ ID NO 290
; LENGTH: 409
; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum
US-11-055-822-290

Query Match 3.5%; Score 81.5; DB 7; Length 409;
Best Local Similarity 22.8%; Pred. No. 8;
Matches 97; Conservative 39; Mismatches 136; Indels 153; Gaps 27;

Qy 137 VTGYEYVPLKDDRRTAQRPIYGPDP--DFISVPLPAGLR-----SGKALVRIQTCK 189
Db 4 VTGL--PVTYPSQEBASICASPAVD--PDTKDSAAYGHESGMRERISNAKRVVVKI---GS 57

Qy 190 NSGTDNTGGTHADLSRFPITARTTAIKGRFE--GSRELPYHTRNQINGGALDGKAPILG 248
Db 58 SSLTNDEG--HTVDPNR--INTVNALQARMEAGSDLIIVS-----SGVAAGNAP--LG 107

Qy 249 YAEQDVEL-----FFMHQGS--GRKLTGPKYIRIGYADKNEHPYVSYGRYM 294
Db 108 LSTRPTELAKQAAAAVQVHLHMQWGRSFARYGRPIGQ--VLLTAADAGK-----RDR 159

Qy 295 ADKGYLKLQGTSMOIKSYMRQNP-----QRLAEVLGQ----- 327
Db 160 ARNAQRTIDKRLGAVPIVNEQDTVATTGVNFGDNDRLAAIHAHLVSADALVLLSDVDG 219
```

```
Qy 328 -----NPSYIFFRELAGSSND-----GPGVAGLGTPLMGEYAGAVDRHYITLGAFLPV 374
Db 220 LFDKNPTDPTAKTIFSEVR--DGNDLKGVIAGDGKVGTTGMSKVSAA--RLASRSQVPLV 277
Qy 375 ATA-----HPVTRKALNRL-----IMADTGSAL-----DGAVRVDYFW 408
Db 278 TSAANIGPALEDAQVGTVFHPKD-----NRLSAWKFALYAADTAGKIRLDDGAVEAVTSG 333
Qy 409 G-----YGD-----EAGELAGK-----QKTTGYVMQLLPNGMK 436
Db 334 GKSLAVGITEILIGDFOQGEIVELGPAGQIIGRGEVSYSDTTLQSMVGMQTDLPDGMQ 393
Qy 437 PEYRP 441
Db 394 ---RP 395

RESULT 15
US-11-082-389-348
; Sequence 348, Application US/11082389
; Publication No. US20050244935A1
; GENERAL INFORMATION:
; APPLICANT: Pompejus, Markus
; APPLICANT: Kröger, Burkhard
; APPLICANT: Schröder, Hartwig
; APPLICANT: Zelder, Oskar
; APPLICANT: Haberhauer, Gregor
; TITLE OF INVENTION: CORYNEBACTERIUM GLUTAMICUM GENES ENCODING PROTEINS
; TITLE OF INVENTION: INVOLVED IN MEMBRANE SYNTHESIS AND MEMBRANE
; TITLE OF INVENTION: TRANSPORT
; FILE REFERENCE: BGI-131CPCN
; CURRENT APPLICATION NUMBER: US/11/082,389
; CURRENT FILING DATE: 2005-03-16
; PRIOR APPLICATION NUMBER: US 09/603024
; PRIOR FILING DATE: 2000-06-23
; PRIOR APPLICATION NUMBER: US 60/141031
; PRIOR FILING DATE: 1999-06-25
; PRIOR APPLICATION NUMBER: US 60/143262
; PRIOR FILING DATE: 1999-07-09
; PRIOR APPLICATION NUMBER: US 60/151281
; PRIOR FILING DATE: 1999-08-27
; PRIOR APPLICATION NUMBER: DE 19930487.4
; PRIOR FILING DATE: 1999-07-01
; PRIOR APPLICATION NUMBER: DE 19930489.0
; PRIOR FILING DATE: 1999-07-01
; PRIOR APPLICATION NUMBER: DE 19931549.3
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19931550.7
; PRIOR FILING DATE: 1999-07-08
; PRIOR APPLICATION NUMBER: DE 19932134.5
; PRIOR FILING DATE: 1999-07-09
; PRIOR APPLICATION NUMBER: DE 19941379.7
; PRIOR FILING DATE: 1999-08-31
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 446
; SEQ ID NO 348
; LENGTH: 534
; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum
US-11-082-389-348

Query Match 3.5%; Score 81; DB 7; Length 534;
Best Local Similarity 19.7%; Pred. No. 13;
Matches 102; Conservative 64; Mismatches 169; Indels 184; Gaps 30;

Qy 14 AAAL---LAACQSKSIQTFPPQDTS-----VING--PDRPVGIPDPAGTTVG 55
Db 12 AAALALSLAACSSDS-----SSDSSSSSGSGGDNYVLVNGTFRPNL---VPGNTNEV 63

Qy 56 GGG-----AVYTVVPHLSLPHWAAODFAKSLQ-----SFRLLCANLKNRQHQDVCAQAFQ 106
Db 64 GGGRIVDISIFSGLYVYDVGSPVNDVAESLEBEGDKTYRI---TIKDGQTFD-----G 114
```


QY 328 -----NPSYIFRELACSGNDGPVG-----ALG-----TPLMGE 356
 Db 714 LFKWFPASPPLAYFIWDKTDAYNQKVGVLSEAVVSGYEVESCLDLTLWEKRTAILQG 773
 QY 357 Y-----AGAVDRHYIT-----LGAPLVATAHPVT-----RKAL----- 385
 Db 774 YELDASNMGGWTLDKHHVLDVQNGILYKNGENQFISQOPPVVSSIMNGRRRSICPSC 833
 QY 386 -----NRLIMAQDTGSAIDGAVRDYFWMGYDEAGELAGKQKTGYVMQLLPNG 434
 Db 834 NQADGNKLLAPVALACGIDGSLYVGDF-----NYVRRIFPSG 871

RESULT 18
 US-11-096-051-2
 ; Sequence 2, Application US/11096051
 ; Publication No. US20050244868A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Kekuda, Ramesh
 ; APPLICANT: MacLachlan, Timothy K
 ; APPLICANT: Rastelli, Luca
 ; APPLICANT: Vernet, Corine
 ; APPLICANT: Etenberg, Seth
 ; TITLE OF INVENTION: Ten-M3 Polypeptides and Polynucleotides and their Methods of Use
 ; FILE REFERENCE: Attorney Docket No. Cura 967
 ; CURRENT APPLICATION NUMBER: US/11/096,051
 ; CURRENT FILING DATE: 2005-03-30
 ; PRIOR APPLICATION NUMBER: 10/038,854
 ; PRIOR FILING DATE: 2001-12-31
 ; PRIOR APPLICATION NUMBER: 10/455,772
 ; PRIOR FILING DATE: 2003-06-04
 ; PRIOR APPLICATION NUMBER: 60/557,978
 ; PRIOR FILING DATE: 2004-03-30
 ; NUMBER OF SEQ ID NOS: 38
 ; SOFTWARE: CuraSeqList version 0.1
 ; SEQ ID NO 2
 ; LENGTH: 2715
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-11-096-051-2

Query Match 3.5%; Score 81; DB 7; Length 2715;
 Best Local Similarity 19.4%; Pred. No. 1.2e+02;
 Matches 92; Conservative 50; Mismatches 137; Indels 196; Gaps 27;

QY 81 LOSFRLGCLANLKNRQGM---QDVCAQAFQTPVHSFQAKQFFER-----YFTPMQV 127
 Db 811 LOS-----SCQNPYCRGLPDPQDIISQSLQSPSQ-AAKSFYDRISFLIGSDSTHVLPGES 866
 QY 128 AGNGLAGTGTGYEPVPLKGDGDRRTAQARFPIYIPDDFISVPLPAGLRSGKALVRIRQT 187
 Db 867 PNKSLASVIRG---QVLTDAGT-----PLIGVNVSFHYP-----EYGTITR----- 907
 QY 188 GKNSTID--NTGGTHADLRSFPITARTTAIKGRFEGSRFL-PVHT----- 231
 Db 908 ---QDGMFLVANGG-----ASITLV---FERSPFLTQYHTVMPNWFVYVMDT 950
 QY 232 -----RNOINGGALDG---KAPILGYAEDPVELEFF-----MHIQSGRL 267
 Db 951 LVMKKEENDIPSCDLSGFVRPNPIL--VSSPLSTFRSSPEDSPIIPETQVLHEE----- 1003
 QY 268 TPKSGYIRIGYADKNEHPYVSGIRYMDKGYLKLQGTSMQGIKSYMRQNPORLAELVQ 327
 Db 1004 TTIPTGDLKLSYLSSRAAGYKSV-----LKI--TWTQSIIPFNLMKVHLMVAVGR 1052
 QY 328 -----NPSYIFRELACSGNDGPVG-----ALG-----TPLMGE 356
 Db 1053 LFKWFPASPPLAYFIWDKTDAYNQKVGVLSEAVVSGYEVESCLDLTLWEKRTAILQG 1112
 QY 357 Y-----AGAVDRHYIT-----LGAPLVATAHPVT-----RKAL----- 385
 Db 1113 YELDASNMGGWTLDKHHVLDVQNGILYKNGENQFISQOPPVVSSIMNGRRRSICPSC 1172

QY 386 -----NRLIMAQDTGSAIDGAVRDYFWMGYDEAGELAGKQKTGYVMQLLPNG 434
 Db 1173 NQADGNKLLAPVALACGIDGSLYVGDF-----NYVRRIFPSG 1210

RESULT 19
 US-11-113-424-51
 ; Sequence 51, Application US/11113424
 ; Publication No. US20050260713A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gangolli et al.
 ; TITLE OF INVENTION: Polypeptides and Nucleic Acids Encoding Same
 ; FILE REFERENCE: 21402-225
 ; CURRENT APPLICATION NUMBER: US/11/113,424
 ; CURRENT FILING DATE: 2005-04-21
 ; PRIOR APPLICATION NUMBER: 60/256,704
 ; PRIOR FILING DATE: 2000-12-19
 ; PRIOR APPLICATION NUMBER: 60/311,590
 ; PRIOR FILING DATE: 2001-08-10
 ; PRIOR APPLICATION NUMBER: 60/257,314
 ; PRIOR FILING DATE: 2000-12-20
 ; PRIOR APPLICATION NUMBER: 60/311,613
 ; PRIOR FILING DATE: 2001-08-10
 ; PRIOR APPLICATION NUMBER: 60/315,617
 ; PRIOR FILING DATE: 2001-08-29
 ; PRIOR APPLICATION NUMBER: 60/307,506
 ; PRIOR FILING DATE: 2001-07-24
 ; PRIOR APPLICATION NUMBER: 60/322,358
 ; PRIOR FILING DATE: 2001-09-14
 ; PRIOR APPLICATION NUMBER: 60/294,075
 ; PRIOR FILING DATE: 2001-05-29
 ; PRIOR APPLICATION NUMBER: 60/288,153
 ; PRIOR FILING DATE: 2001-05-02
 ; NUMBER OF SEQ ID NOS: 190
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 51
 ; LENGTH: 2715
 ; TYPE: PRT
 ; ORGANISM: Mus musculus
 US-11-113-424-51

Query Match 3.5%; Score 81; DB 7; Length 2715;
 Best Local Similarity 18.7%; Pred. No. 1.2e+02;
 Matches 89; Conservative 49; Mismatches 140; Indels 198; Gaps 23;

QY 81 LOSFRLGCLANLKNRQGM---QDVCAQAFQTPVHSFQAKQFFER-----YFTPMQV 127
 Db 811 LOS-----SCQNPYCRGLPDPQDIISQSLQSPSQ-AAKSFYDRISFLIGSDSTHVLPGES 866
 QY 128 AGNGLAGTGTGYEPVPLKGDGDRRTAQARFPIYIPDDFISVPLPAGLRSGKALVRIRQT 187
 Db 867 PNKSLASVIRG---QVLTDAGT-----PLIGVNVSFH-- 897
 QY 188 GKNSTIDNTGGTHADLRSFPITARTTA--IKGRFEGSRFL-PVHT----- 231
 Db 898 -----YSEGYTITRODGMEDLVANGASITLVFERSPFLTQYHTVMPNWFVYVMDTL 951
 QY 232 -----RNOINGGALDG---KAPILGYAEDPVELEFF-----MHIQSGRLK 268
 Db 952 VMKKEENDIPSCDLSGFVRPSPIL--VSSPLSTFRSSPEDSPIIPETQVLHEE-----T 1004
 QY 269 TPKSGYIRIGYADKNEHPYVSGIRYMDKGYLKLQGTSMQGIKSYMRQNPORLAELVQ- 327
 Db 1005 TTIPTGDLKLSYLSSRAAGYKSV-----LKI--TWTQAVIPFNLMKVHLMVAVVGR 1053
 QY 328 -----NPSYIFRELACSGNDGPVG----- 347
 Db 1054 FQKWFASPPLAYFIWDKTDAYNQKVGVLSEAVVSGYEVESCLDLTLWEKRTAVLQY 1113
 QY 348 ALGTPLEGEYAGAVDRHYIT-----LGAPLVATAHPVT-----RKAL----- 385
 Db 1114 YELDASNMGGW--TLDKHHVLDVQNGILYKNGENQFISQOPPVVSSIMNGRRRSICPS 1171

; TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/467,657
; CURRENT FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: GB-0103424.8
; PRIOR FILING DATE: 2001-02-12
; NUMBER OF SEQ ID NOS: 9218
; SOFTWARE: SeqWin99, version 1.04
; SEQ ID NO 2704
; LENGTH: 1565
; TYPE: PRT
; ORGANISM: Neisseria gonorrhoeae
US-10-467-657-2704

Query Match 3.4%; Score 79.5; DB 6; Length 1565;
Best Local Similarity 21.2%; Pred. No. 77;
Matches 87; Conservative 40; Mismatches 140; Indels 143; Gaps 21;
QY 48 DPAGTTVGGGAVTVVPHLSLPHWAAQDPKSLQSPRLGCAN-----LKNRQG--WQDVC 101
DB 299 DNAGTVKNG-----EH-----HWKTTGTNSHIGSTAVRLANNEGDANNGQNVTFEDNG 347
QY 102 AQAFTVPFSGHFOAKOFFERYFT-----PMQV-----A 128
DB 348 TLVLQDNLNQAGAGLFFPKGDYTVKCANNDITWLGAGIDVADGKKVWQVKNPNGDRLAKI 407
QY 129 GNGSLAGTVTGYEYEV-----KGDRRTAQAARFYIYGI-----PDDF 166
DB 408 GKGTLLEINGTVNQGLKVGDTVLNQKADSNQKVA--FSQGVIVSGRGTVLVNSPDQI 466
QY 167 ISVPLPAGLRSGKALVRITQTKNSGTTDNTGGTHTADLSRPPITARTAIKGRPEGSRP 226
DB 467 PNNLYFGRGR-----LDANGNDLTFE-----HIRNVDGARI 501
QY 227 LPYHTRNQGALDGKAPILG-----YAEPPVELFFMHQISGRGLKTPSGKY 274
DB 502 VNHNT-DHASTITLTGKSLIINPNLSVHSIQNDYDENYSYY-----RPRRPIQKD 555
QY 275 IRIQVADKNEHYV-----SIGRYMADKG-----YKLGOTSMQGIKSYM-RQNQRLA 322
DB 556 LVY-----KNRYVALKSGSVNAPNPENGQNTENNNDWILMGSTQEBAKNMHKNQRIS 611
QY 323 EVLGNQPSYIIFRELAGSNDGPVGCALGTPLMGEYAGAVDRHYITLGAFL 372
DB 612 GFSG-----PFGEENGKHN---GALNLFNGK---SAQNRFLTGTGANL 650

RESULT 23
US-10-467-657-1784
; Sequence 1784, Application US/10467657
; Publication No. US20050260581A1
; GENERAL INFORMATION:
; APPLICANT: CHIRON SPA
; APPLICANT: FONTANA Maria Rita
; APPLICANT: PIZZA Mariagrazia
; APPLICANT: MASIGNANI Vega
; APPLICANT: MONACI Elisabetta
; TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/467,657
; CURRENT FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: GB-0103424.8
; PRIOR FILING DATE: 2001-02-12
; NUMBER OF SEQ ID NOS: 9218
; SOFTWARE: SeqWin99, version 1.04
; SEQ ID NO 1784
; LENGTH: 392
; TYPE: PRT
; ORGANISM: Neisseria gonorrhoeae
US-10-467-657-1784

Query Match 3.3%; Score 78; DB 6; Length 392;
Best Local Similarity 22.4%; Pred. No. 15;

Matches 52; Conservative 33; Mismatches 111; Indels 36; Gaps 10;
QY 169 VPLPAGLRSGKALVRIR-----OTGKNSGTTDNTGGTHTADLSRPPITAR---TTAIKGR 220
DB 67 VP-PAIDRDYPAKVRVKMETVKTMKMDGGEYRYVTPTDGDVPGRMIRREGDTVEVERFS 125
QY 221 FEGSRFLP-----YHTRNQINGGA-----LDGKAPILGYAEDPVELFFMH---IQSGRLKT 269
DB 126 NNPSTVPHNVDFHAATGQGGGAAATFTAPGRTSTFSFKALQPGLYIYHCAVAPVG-MHI 184
QY 270 PSGKYIRIGYADKNEHPVVSIGRYMADKGLKGTSMQGIKSYMKNQNPORLAELVGNP 329
DB 185 ANGMVGLILVEPKGLPKVDKFEYIVQGDFTYTKGKKGAGGLQ-----PFMDKAVASQP 238
QY 330 SYIFRELAGSNDGPVGCAL-GTPLMGGEYAGAVDRHYITLGAFLPVATAHPV 380
DB 239 EYVVF-----NGHVGAIGADNALKAKAGETVRMYVVGNGGPNLVSSFHVI 282

RESULT 24
US-10-131-826A-144
; Sequence 144, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvarcoff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C128
; CURRENT APPLICATION NUMBER: US/10/131,826A
; CURRENT FILING DATE: 2002-04-24
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 144
; LENGTH: 520
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-131-826A-144

```
Query Match      3.3%; Score 78; DB 6; Length 520;
Best Local Similarity 23.9%; Pred. No. 23;
Matches 64; Conservative 23; Mismatches 107; Indels 74; Gaps 13;

QY 243 KAPILGYAEDPVELF--FMHIQSGRLKTPSGKYI---RIGYADKNEHPYVSGRYMAD- 296
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 52 KAPTSTFSDAIRAFQVWSQLPVSGVLDRLQMTQTRPCGVDTNS--YAAWAERISDL 109
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 297 -----KGYLKLQGTSMQGIKSYMQRN-PQRLAE-----VLGNPSPYIF 333
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 110 FARHRTQRRKGRFAKQGNKWYKQHLSYRLVNWPEHLPEPAVRGAVRAAFQLMSNSALE 169
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 334 FREL-----AGSSNDGPVCGALG---TLMGEVAGAVDRHYI---T 367
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 170 FWEAPATGPADIRLTFFQGDHNDLGNAFDQPGGALAHAFLPRRGEAHFQDQDERWSLSRR 229
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 368 LGAPLFLVATAHPV-----TRKALNRLIMA-----QDTGSAIDGAVRVDFWGY---G 411
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 230 RGRNLFVLAHEIGHTLGLTHSPAPRALMAPYYKRLGRDALLSWDDVLAVQSLYGRPLGG 289
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 412 DEAGELAGKOKTTGYVM-QLLPNQMKPE 438
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 290 SVAVOLPGKLTDPETWDSYSPQRRPE 317
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

RESULT 25
US-10-467-657-7930
; Sequence 7930, Application US/10467657
; Publication No. US20050260581A1
; GENERAL INFORMATION:
; APPLICANT: CHIRON SpA
; APPLICANT: FONTANA Maria Rita
; APPLICANT: PIZZA Mariagrazia
; APPLICANT: MASIENANI Vega
; APPLICANT: MONACI Elisabetta
; TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/467,657
; CURRENT FILING DATE: 2003-08-11
; PRIOR FILING DATE: 2003-08-11
; PRIOR FILING DATE: 2001-02-12
; NUMBER OF SEQ ID NOS: 9218
; SOFTWARE: SeqWin99, version 1.04
; SEQ ID NO 7930
; LENGTH: 1394
; TYPE: PRT
; ORGANISM: Neisseria gonorrhoeae
US-10-467-657-7930

Query Match      3.3%; Score 78; DB 6; Length 1394;
Best Local Similarity 19.7%; Pred. No. 89;
Matches 63; Conservative 40; Mismatches 97; Indels 120; Gaps 15;

QY 169 VPL--PAG--LRSGKALVRIRQTKNSGTI--DMTGGTHTADLSRFPITARTTAIKGRFE 222
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 133 IPLMTPSGSVINTERTVIVSQLHRSQGVFFEHDKGKTHSGKLLF----- 178
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 223 GSRELPYHTRNQINGGALD-----GKAPI-----LGYAEDPV----- 254
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 179 SARIIPY-----RGSWLDPEFDPKLLYFRIDRRRKMPVTILLKALGYNNEQLDIFYD 232
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 255 -ELFFMHIOG-----SGRLKTPSGKYIRIGYADKNEHPYVSGRYMADKY----- 299
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 233 KETYLSSNGVQTDLVAGRLK--GETAKVDILDKEGNVLVAKGKRITAKNRIDITNAGL 289
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 300 --LKLQGTSMQGIKSYMQRNQPORLAELVGNQSPYIFFRELAGSSNDGPVCGALGTPLMGEY 357
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 290 TRLDVEESLLG-----KALAADLIDSETGEV-----L 317
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 358 AGAVDRHYITLGAFLVATAHPVTRKALNRLIMAQDTGSAIDGAVRVDFWGYGDEAGEL 417
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 318 ASANDEITEELLAKFDINGVKETITLVINEL----DQGAVISNTLRTD-----ET 363
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 418 AGKQKTTGYVWQLLPQMKP 437
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 364 AGQQAARVAIYRMRPGEPP 383
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

RESULT 26
US-11-143-980-47
; Sequence 47, Application US/11143980
; Publication No. US20050272133A1
; GENERAL INFORMATION:
; APPLICANT: He, Min
; APPLICANT: Hucul, John
; APPLICANT: Haltli, Bradley A.
; APPLICANT: Wagenaar, Melissa M.
; APPLICANT: Graziani, Edmund
; APPLICANT: Summers, Mia
; APPLICANT: Kulowski, Kerry
; APPLICANT: Pong, Kevin
; TITLE OF INVENTION: Biosynthetic Gene Cluster for the Production of a Complex
; TITLE OF INVENTION: Polyketide
; FILE REFERENCE: AM-101426US
; CURRENT APPLICATION NUMBER: US/11/143,980
; CURRENT FILING DATE: 2005-06-03
; PRIOR FILING DATE: 2005-06-03
; PRIOR FILING DATE: 2005-03-23
; PRIOR FILING DATE: 2005-03-23
; PRIOR FILING DATE: 2004-06-03
; NUMBER OF SEQ ID NOS: 72
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 47
; LENGTH: 5712
; TYPE: PRT
; ORGANISM: Streptomyces sp.
US-11-143-980-47

Query Match      3.3%; Score 78; DB 7; Length 5712;
Best Local Similarity 21.8%; Pred. No. 6.3e+02;
Matches 45; Conservative 27; Mismatches 72; Indels 62; Gaps 7;

QY 6 FRAALYGIARAAILAACQSKSIQTFPQDTSVINGPRPVGIPDPAGTT----- 53
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 3281 FQSAIEG---LLELGHTVFVEASPHVLT-----VGIQDTAETTTDILVTGSLRR 3328
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 54 VGGGAVYTVPHLSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAFQTPVHSFQ 113
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 3329 DGGGLA-----SFLTALARLHVRGAVVEAREAFAGLDHAHVDLPTVAFQ 3372
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 114 AKQFFERYF-----TPMQVAGNGSLAGTVTGYEYFVLKGGDDRRTAQAR 156
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 3373 RRFWAASLRQTPGTAEFDHPLLGAVLPLPDSGGGLLTGVLTLAGQPWL-AEHSVAGVVL 3431
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

QY 157 FPTYGIPDDFISVPLPAGLRSGKALV 182
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :
Db 3432 FPGTG---FVELVLQAGLRWGGGV 3453
   |||  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :

RESULT 27
US-10-793-626-2774
; Sequence 2774, Application US/10793626
; Publication No. US20050255478A1
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: P03480US
; CURRENT APPLICATION NUMBER: US/10/793,626
; CURRENT FILING DATE: 2004-03-04
; PRIOR FILING DATE: 2004-03-04
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 2774
; LENGTH: 400
```


Job time : 12 secs

```

Db      249  TLVGSMDQAVTGWMLTAL-----ARLGDALF-----LTAGIVVG-ILISUR-- 288
Qy      188  GKNSGTTIDNTGGTHTADLSRFPITARTT-AIKGRFEGSRFLPYHTRNQINGGALDGRA-P 245
Db      289  -----GVTNAGIQIELHVDATTTLATPG-----MPLVILVAVSGAALSGVCLT 331
Qy      246  ILGYAEDVELFMFHIOGSGRLKTPPSKYYIRIGYADKNKHPYVSIGRYMDADKGYLKLQGT 305
Db      332  IASYAP-----LRSVATAGLSAGLAE-----LVLLIGLGAAGFGRVAVTWT 371
Qy      306  SMOGIK-----SYMRQNPORLAEVLQNPYSY-----IFFRELAGSSNDGPVG----- 347
Db      372  AATGVGFLATLISIRROAPALVTATAGIMPMLPGLAVFRAVFAPAVNDTDPDGLTQLLEA 431
Qy      348  -----ALGT-PLMGEYAGAVDRHYITLGCALPLFVATAHPVTRKALNRLIMAAQDTGS 396
Db      432  AATALAGSGVILGEFLASPLRYCAGRIGDLFRIEGPPGLRRAVGRVVRLOPAKS 486

RESULT 30
US-10-821-234-1262
; Sequence 1262, Application US/10821234
; Publication No. US200502551141
; GENERAL INFORMATION:
; APPLICANT: Labat, Ivan
; APPLICANT: Stache-Crain, Birgit
; APPLICANT: Andarmani, Susan
; APPLICANT: Tang, Y. Tom
; TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
; FILE REFERENCE: 821A
; CURRENT APPLICATION NUMBER: US/10/821,234
; CURRENT FILING DATE: 2004-04-07
; PRIOR APPLICATION NUMBER: US 60/462,047
; PRIOR FILING DATE: 2003-04-07
; NUMBER OF SEQ ID NOS: 1704
; SOFTWARE: Pt_SEQ_genes version 1.0
; SEQ ID NO 1262
; LENGTH: 2657
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-821-234-1262

Query Match      3.3%; Score 77.5; DB 6; Length 2657;
Best Local Similarity 20.1%; Pred. No. 2.4e+02;
Matches 71; Conservative 39; Mismatches 101; Indels 143; Gaps 17;

Qy      135  GTVTGYEYEPVLKG-----DDRTAQARFPIGIPDDFI--- 167
Db      1929  GTCTVTYLTPLPGDYSILVKYNDKHIFGSPPTAKITDDSRCSQVKL---GSAADFLLDI 1985
Qy      168  -----SVPLPAGLRSGKALVRI-----ROTKNSGTIDNTGGTHTADLS 206
Db      1986  SETDLSLTASIKAPSGRDEPCLLKRLPNHHIGISFIPREVGHEHLVSI-KXNGHNVAN-- 2042
Qy      207  RFPIT-----ARTTAIKGR-----FEGSRFLPYHTRNQINGG---ALDGRKAPI 246
Db      2043  -SPVSIMVQSEIGDARRAKVYGRGLSEGRTFEMSDFI-VDTRDAGYGGISLAVEGPSKV 2100
Qy      247  LGYAE-----PVLEFPMHIQSGRLKTPPSKYYIRI 277
Db      2101  DIQTEDELDGTCVKYSYFPTVGVIYVSTKFADEHVPGPSPTFKVLSGEGRVKESITRTSRA 2160
Qy      278  GYADKNKHPYVSIGRYMDADKGYLKLQGTSMOGIKSYMRQNPORLAEV-----LGNQPSYIF 333
Db      2161  -----PSVATVGSICDLN-LKIPENSSDMSAHVTSPSGRVTEAEIYPMGKNSHCVR 2211
Qy      334  F-----RELAGSSNDGPVGALGTPLMGEYAGAVDRHYITLGP 371
Db      2212  FVPOEMGVHTVSVKRYGQHTGTSFQFTVGPGLGE-----GCA---HKVRAGGP 2256

```

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 30, 2005, 08:25:13 ; Search time 164 Seconds
(without alignments)
1123.553 Million cell updates/sec

Title: US-09-914-454B-31

Perfect score: 2340

Sequence: 1 MKKYLFRALYGIAAAILAA.....KTTGYVWQLPNGMKPYRYP 441

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA_Main:

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pap.*
- 2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pap.*
- 3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pap.*
- 4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pap.*
- 5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pap.*
- 6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2332	99.7	441	5	US-10-915-740A-993
2	2333	99.7	441	5	US-10-915-740A-995
3	2330	99.6	441	4	US-10-181-660-14
4	2330	99.6	441	4	US-10-220-481-1
5	2330	99.6	441	5	US-10-181-600-14
6	2302	98.4	441	4	US-10-121-456A-1
7	2302	98.4	441	5	US-10-915-740A-999
8	2262	96.7	440	4	US-10-220-481-3
9	2257	96.5	441	5	US-10-915-740A-997
10	2236	95.6	832	4	US-10-220-480-4
11	2236	95.6	832	4	US-10-220-481-89
12	2236	95.6	897	4	US-10-220-480-10
13	2236	95.6	897	4	US-10-220-481-95
14	2227	95.2	420	4	US-10-220-481-2
15	1015	43.4	194	4	US-10-220-481-8
16	316.5	13.5	367	4	US-10-415-017-2
17	316.5	13.5	367	4	US-10-415-017-6
18	316.5	13.5	367	4	US-10-415-017-10
19	315.5	13.5	367	4	US-10-415-017-8
20	314.5	13.4	367	4	US-10-415-017-4
21	238.5	10.2	196	4	US-10-220-481-9
22	225.5	9.6	1118	5	US-10-450-763-54683
23	138	5.9	628	5	US-10-450-763-59399
24	137.5	5.9	88	4	US-10-425-115-193992
25	111	4.7	440	4	US-10-424-599-206691
26	108	4.6	676	4	US-10-282-122A-56343
27	106	4.5	1006	5	US-10-484-218-22

28 102.5 4.4 503 4 US-10-369-493-17897 Sequence 17897, A
29 102 4.4 463 4 US-10-282-122A-52178 Sequence 52178, A
30 102 4.4 627 4 US-10-282-122A-55128 Sequence 55128, A
31 102 4.4 3745 4 US-10-205-032-14 Sequence 14, Appl
32 101.5 4.3 457 4 US-10-156-761-12009 Sequence 12009, A
33 101 4.3 359 4 US-10-016-668-4 Sequence 4, Appli
34 100 4.3 502 4 US-10-369-493-10113 Sequence 10113, A
35 100 4.3 506 4 US-10-282-122A-54065 Sequence 54065, A
36 98.5 4.2 357 4 US-10-424-599-253747 Sequence 253747, A
37 98.5 4.2 1616 3 US-09-712-363-362 Sequence 262, App
38 98.5 4.2 1616 4 US-10-282-122A-64807 Sequence 64807, A
39 98.5 4.2 1799 4 US-10-282-122A-62790 Sequence 62790, A
40 97.5 4.2 820 4 US-10-282-122A-66383 Sequence 66383, A
41 97.5 4.2 1279 4 US-10-332-288-6 Sequence 6, Appli
42 97 4.1 249 4 US-10-220-481-116 Sequence 116, App
43 97 4.1 2448 4 US-10-210-172-48 Sequence 48, Appl
44 97 4.1 3217 4 US-10-311-623-8 Sequence 8, Appli
45 97 4.1 3298 4 US-10-160-758-16 Sequence 16, Appl

ALIGNMENTS

RESULT 1

US-10-915-740A-993

; Sequence 993, Application US/10915740A

; Publication No. US20050191316A1

; GENERAL INFORMATION:

; APPLICANT: Frazer, Claire M.

; APPLICANT: Hickey, Erin

; APPLICANT: Peterson, Jeremy

; APPLICANT: Tettelin, Herve

; APPLICANT: Venter, J. Craig

; APPLICANT: Masignani, Vega

; APPLICANT: Galeotti, Cesira

; APPLICANT: Mora, Manroga

; APPLICANT: Ratti, Giulio

; APPLICANT: Scarselli, Maria

; APPLICANT: Scarlato, Vincenzo

; APPLICANT: Rappuoli, Rino

; APPLICANT: Pizza, Mariagrazia

; APPLICANT: Grandi, Guido

; TITLE OF INVENTION: Neisseria Genomic Sequences And Methods Of Their Use

; FILE REFERENCE: 002441.00090

; CURRENT APPLICATION NUMBER: US/10/915,740A

; PRIOR FILING DATE: 2004-08-11

; PRIOR APPLICATION NUMBER: 09/806,866

; PRIOR FILING DATE: 1999-10-08

; PRIOR APPLICATION NUMBER: US99/25373

; PRIOR FILING DATE: 1998-10-09

; PRIOR APPLICATION NUMBER: US99/25373

; PRIOR FILING DATE: 1999-04-30

; PRIOR APPLICATION NUMBER: PCT/US99/25373

; PRIOR FILING DATE: 1999-10-08

; NUMBER OF SEQ ID NOS: 1068

; SOFTWARE: Patent in version 3.2

; SEQ ID NO 993

; LENGTH: 441

; TYPE: PRT

; ORGANISM: Neisseria meningitidis

US-10-915-740A-993

Query Match 99.7%; Score 2333; DB 5; Length 441;

Best Local Similarity 99.8%; Pred. No. 9.5e-215;

Matches 440; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MKKYLFRALYGIAAAILAACQSKSIQTFFPPDTSVINGPDRPVGIPDPAGTTVGGGAV 60

Db 1 MKKYLFRALYGIAAAILAACQSKSIQTFFPPDTSVINGPDRPVGIPDPAGTTVGGGAV 60

Qy 61 YTVVPHLSLPHWAQDFAKSLQSFRLGCANLKNRGWQDVCAQAFQTPVHSFQAQKFFER 120

Db 61 YTVVPHLSLPHWAQDFAKSLQSFRLGCANLKNRGWQDVCAQAFQTPVHSFQAQKFFER 120

Qy	121	YFTPWAGN	SLAGTV	GYEYEP	VVLKGD	RRTAQ	ARFPIY	GIPDDF	IISVPL	PAGLRSGK	180
Db	121	YFTPWAGN	SLAGTV	GYEYEP	VVLKGD	RRTAQ	ARFPIY	GIPDDF	IISVPL	PAGLRSGK	180
Qy	181	LVRIROTG	KNSGT	TDNTGG	THADLS	RRPPIA	RTTAAI	KGRPEG	SRRFLPYH	TRNOINGAL	240
Db	181	LVRIROTG	KNSGT	TDNTGG	THADLS	RRPPIA	RTTAAI	KGRPEG	SRRFLPYH	TRNOINGAL	240
Qy	241	DGKAPILG	YAEDP	VELFM	FIHQSG	RLTPSG	KYIRIG	YADKNE	HPYVSI	GRYMA	300
Db	241	DGKAPILG	YAEDP	VELFM	FIHQSG	RLTPSG	KYIRIG	YADKNE	HPYVSI	GRYMA	300
Qy	301	KLQGTSMQ	GIKSYMR	QNPRQ	LAELV	LQNP	SYIFFR	ELAGSN	DGPVGA	LGTPLMEY	360
Db	301	KLQGTSMQ	GIKSYMR	QNPRQ	LAELV	LQNP	SYIFFR	ELAGSN	DGPVGA	LGTPLMEY	360
Qy	361	VDRHYITL	GAPLF	VATAHP	VT	RKALNR	LIMAQ	DTS	AIDG	AVRVDY	420
Db	361	VDRHYITL	GAPLF	VATAHP	VT	RKALNR	LIMAQ	DTS	AIDG	AVRVDY	420
Qy	421	QKTTGYV	WQLLP	NGMK	PEYR	441					
Db	421	QKTTGYV	WQLLP	NGMK	PEYR	441					

RESULT 2

```

US-10-915-740A-995
; Sequence 995, Application US/10915740A
; Publication No. US20050191316A1
; GENERAL INFORMATION:
; APPLICANT: Frazer, Claire M.
; APPLICANT: Hickey, Erin
; APPLICANT: Peterson, Jeremy
; APPLICANT: Tetelin, Herve
; APPLICANT: Venter, J. Craig
; APPLICANT: Massignani, Vega
; APPLICANT: Galeotti, Cesira
; APPLICANT: Mora, Manroosa
; APPLICANT: Ratti, Giulio
; APPLICANT: Scarselli, Maria
; APPLICANT: Scarlato, Vincenzo
; APPLICANT: Rappuoli, Rino
; APPLICANT: Pizzo, Mariagrazia
; APPLICANT: Grandi, Guido
; TITLE OF INVENTION: Neisseria Genomic Sequences And Methods Of Their Use
; FILE REFERENCE: 002441.00090
; CURRENT APPLICATION NUMBER: US/10/915,740A

```

FILE REFERENCE: 002441.00090
CURRENT APPLICATION NUMBER: US/10/915,740A

```

, CURRENT FILING DATE: 2004-08-11
, PRIOR APPLICATION NUMBER: 09/806,866
, PRIOR FILING DATE: 1999-10-08
, PRIOR APPLICATION NUMBER: USSN 60/103,794
, PRIOR FILING DATE: 1998-10-09
, PRIOR APPLICATION NUMBER: USSN 60/132,068
, PRIOR FILING DATE: 1999-04-30
, PRIOR APPLICATION NUMBER: PCT/US99/25373
, PRIOR FILING DATE: 1999-10-08
, NUMBER OF SEQ ID NOS: 1068
, SOFTWARE: PatentIn version 3.2
, SEQ ID NO 995
, LENGTH: 441
, TYPE: PRT
, ORGANISM: Neisseria meningitidis
US-10-915-740A-995

```

Query Match	99.7%	Score 2333	DB 5	Length 441
Best Local Similarity	99.8%	Pred. No. 9.5e-215		
Matches 440	Conservative 0	Mismatches 1	Indels 0	Gaps 0
Qy	1	MKKYLFRAALYGI A A A A I I A A C Q S K S I O T F P O P D T S V I N G D R P R V G I E D P P A G T T V G G G C A V	60	
Db	1	MKKYLFRAALYGI A A A A I I A A C Q S K S I O T F P O P D T S V I N G D R P R V G I E D P P A G T T V G G G C A V	60	

Qy		61	YTVVPHLSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAFQPPVHSFOAKQFFER	120
Dd		61	YTVVPHLSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAFQPPVHSFOAKQFFER	120
Qy		121	YFTPWQVAGNSLAGTVTGYEYPVLKGDDRTAQAREPIYGIIPDDFTSVPLPAGLRSGKA	180
Dd		121	YFTPWQVAGNSLAGTVTGYEYPVLKGDDRTAQAREPIYGIIPDDFTSVPLPAGLRSGKA	180
Qy		181	LVRIROTGKNSGITDNTGGTHTDLSRFPITARTAIKGRFEGSRFLPYHTRNQINGCAL	240
Dd		181	LVRIROTGKNSGITDNTGGTHTDLSRFPITARTAIKGRFEGSRFLPYHTRNQINGCAL	240
Qy		241	DGXAPILGYAEDPVLEPFMHIOGSGRLKTPSGKYIRIGYADKNEHPYVSIGRYNMADKGYL	300
Dd		241	DGXAPILGYAEDPVLEPFMHIOGSGRLKTPSGKYIRIGYADKNEHPYVSIGRYNMADKGYL	300
Qy		301	KLGOTSMOQIKSYMRQPORLAELVILGNPSYIIFRELAGSNDGPVCALGTPLMGEYAGA	360
Dd		301	KLGOTSMOQIKSYMRQPORLAELVILGNPSYIIFRELAGSNDGPVCALGTPLMGEYAGA	360
Qy		361	VDRHYITLGAPLFVATAHPVTRKALNRLINMAQDTGSADICAVRVDPYFWGYGDEAGELAGK	420
Dd		361	VDRHYITLGAPLFVATAHPVTRKALNRLINMAQDTGSADICAVRVDPYFWGYGDEAGELAGK	420
Qy		421	OKTTGYVWOLLNGMKPEYRP	441
Dd		421	OKTTGYVWOLLNGMKPEYRP	441

RESULT 3

```

US-10-181-660-14
; Sequence 14, Application US/10181660
; Publication No. US20030027097A1
; GENERAL INFORMATION:
; APPLICANT: CHIRON SpA
; TITLE OF INVENTION: SUPPLEMENTED OMV VACCINE AGAINST MENINGOCOCCUS
; FILE REFERENCE: P023785WO
; CURRENT APPLICATION NUMBER: US/10/181.660
; CURRENT FILING DATE: 2003-03-31
; PRIOR APPLICATION NUMBER: GB-0001067.8
; PRIOR FILING DATE: 2000-01-17
; PRIOR APPLICATION NUMBER: GB-0005699.4
; PRIOR FILING DATE: 2000-03-09
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 14
; LENGTH: 441
; TYPE: PRT
; ORGANISM: Neisseria meningitidis
US-10-181-660-14

```

Query Match	99.6%;	Score 2330;	DB 4;	Length 441;
Best Local Similarity	99.5%;	Pred. No. 1.8e-214;		
Matches 439;	Conservative 1;	Mismatches 1;	Indels 0;	Gaps 0;
Qy	1	MKKYLFRAALYGIAAAILAAACQSKSIOTFPQDPTSVINGPDRPVGIPDPAGTTVGGGAV	60	
Db	1	MKKYLFRAALYGIAAAILAAACQSKSIOTFPQDPTSVINGPDRPVGIPDPAGTTVGGGAV	60	
Qy	61	YTVVPHLSLPHWAAQDFAKSLQSPRLGCANLKNRQGWQDVCAQAFQTVHVSFOAKQPFER	120	
Db	61	YTVVPHLSLPHWAAQDFAKSLQSPRLGCANLKNRQGWQDVCAQAFQTVHVSFOAKQPFER	120	
Qy	121	YFTPWQVAGNSLAGTGTGYEYVPLKGDRTTAQAREPPIYGIPDDFTSVPLPAGIRSGKA	180	
Db	121	YFTPWQVAGNSLAGTGTGYEYVPLKGDRTTAQAREPPIYGIPDDFTSVPLPAGIRSGKA	180	
Qy	181	LVRIRQTGKNSGTTDNTGGTHADLSRFPITARTTAJKRFEGRSRFIPYHTRNOINGGAL	240	
Db	181	LVRIRQTGKNSGTTDNTGGTHADLSRFPITARTTAJKRFEGRSRFIPYHTRNOINGGAL	240	
Qy	241	DGKAPILGYAEDPVELFPMHIIQSGSRUKTIPSGKYIRIGYADKDNHPHYVSGRYMADKGYL	300	

Db 241 DGKAPILGYAEDPVELPFMHVQSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMADKGYL 300
Qy 301 KLGQTSMOGIIKSYMRQNPORLAELVQNPSPYIFFRELAGSSNDGPGVAGLGTPLMGEYAGA 360
Db 301 KLGQTSMOGIIKAYMRQNPORLAELVQNPSPYIFFRELAGSSNDGPGVAGLGTPLMGEYAGA 360
Qy 361 VDRHYITLGAFLFVATAHPVTRKALNRLIMAQDTGSAIDGAVRVDYFWGYGDEAGELAGK 420
Db 361 VDRHYITLGAFLFVATAHPVTRKALNRLIMAQDTGSAIDGAVRVDYFWGYGDEAGELAGK 420
Qy 421 QKTTGYVWQLLPNGMKPEYRP 441
Db 421 QKTTGYVWQLLPNGMKPEYRP 441

RESULT 4

US-10-220-481-1
; Sequence 1, Application US/10220481
; Publication No. US20040110670A1
; GENERAL INFORMATION:
; APPLICANT: ARICO, Maria B., et al.
; TITLE OF INVENTION: Heterologous Expression of Neisserial Proteins
; FILE REFERENCE: CHIR-15883/01US
; CURRENT APPLICATION NUMBER: US/10/220,481
; CURRENT FILING DATE: 2003-05-05
; PRIOR APPLICATION NUMBER: PCT/IB01/00452
; PRIOR FILING DATE: 2001-02-28
; NUMBER OF SEQ ID NOS: 633
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 1
; LENGTH: 441
; TYPE: PRT
; ORGANISM: Neisseria meningitidis
US-10-220-481-1

Query Match 99.6%; Score 2330; DB 4; Length 441;
Best Local Similarity 99.5%; Pred. No. 1.8e-214;
Matches 439; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 MKKYLFRALYGVIAAAIILAAQCSKSIQTFPPQDTSVINGPDRPVGIPDPAGTTVGGGAV 60
Db 1 MKKYLFRALYGVIAAAIILAAQCSKSIQTFPPQDTSVINGPDRPVGIPDPAGTTVGGGAV 60
Qy 61 YTVVPHLSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAFQTPVHSFOAKQPPER 120
Db 61 YTVVPHLSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAFQTPVHSFOAKQPPER 120
Qy 121 YFTPMQVAGNSLAGTGTGGTHTADLSRPFITARTTAIKGRFEGSRFLPYHTRNQINGGAL 180
Db 121 YFTPMQVAGNSLAGTGTGGTHTADLSRPFITARTTAIKGRFEGSRFLPYHTRNQINGGAL 180
Qy 181 LVRIQTKNSGTTDNTGGTHTADLSRPFITARTTAIKGRFEGSRFLPYHTRNQINGGAL 240
Db 181 LVRIQTKNSGTTDNTGGTHTADLSRPFITARTTAIKGRFEGSRFLPYHTRNQINGGAL 240
Qy 241 DGKAPILGYAEDPVELPFMHVQSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMADKGYL 300
Db 241 DGKAPILGYAEDPVELPFMHVQSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMADKGYL 300
Qy 301 KLGQTSMOGIIKSYMRQNPORLAELVQNPSPYIFFRELAGSSNDGPGVAGLGTPLMGEYAGA 360
Db 301 KLGQTSMOGIIKAYMRQNPORLAELVQNPSPYIFFRELAGSSNDGPGVAGLGTPLMGEYAGA 360
Qy 361 VDRHYITLGAFLFVATAHPVTRKALNRLIMAQDTGSAIDGAVRVDYFWGYGDEAGELAGK 420
Db 361 VDRHYITLGAFLFVATAHPVTRKALNRLIMAQDTGSAIDGAVRVDYFWGYGDEAGELAGK 420
Qy 421 QKTTGYVWQLLPNGMKPEYRP 441
Db 421 QKTTGYVWQLLPNGMKPEYRP 441

RESULT 5

US-10-181-600-14
; Sequence 14, Application US/10181600
; Publication No. US20040249125A1
; GENERAL INFORMATION:
; APPLICANT: CHIRON Spa
; TITLE OF INVENTION: SUPPLEMENTED OMV VACCINE AGAINST MENINGOCOCCUS
; FILE REFERENCE: P023785WO
; CURRENT APPLICATION NUMBER: US/10/181,600
; CURRENT FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: GB-0001067.8
; PRIOR FILING DATE: 2000-01-17
; PRIOR APPLICATION NUMBER: GB-0005699.4
; PRIOR FILING DATE: 2000-03-09
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 14
; LENGTH: 441
; TYPE: PRT
; ORGANISM: Neisseria meningitidis
US-10-181-600-14

Query Match 99.6%; Score 2330; DB 5; Length 441;
Best Local Similarity 99.5%; Pred. No. 1.8e-214;
Matches 439; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 MKKYLFRALYGVIAAAIILAAQCSKSIQTFPPQDTSVINGPDRPVGIPDPAGTTVGGGAV 60
Db 1 MKKYLFRALYGVIAAAIILAAQCSKSIQTFPPQDTSVINGPDRPVGIPDPAGTTVGGGAV 60
Qy 61 YTVVPHLSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAFQTPVHSFOAKQPPER 120
Db 61 YTVVPHLSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAFQTPVHSFOAKQPPER 120
Qy 121 YFTPMQVAGNSLAGTGTGGTHTADLSRPFITARTTAIKGRFEGSRFLPYHTRNQINGGAL 180
Db 121 YFTPMQVAGNSLAGTGTGGTHTADLSRPFITARTTAIKGRFEGSRFLPYHTRNQINGGAL 180
Qy 181 LVRIQTKNSGTTDNTGGTHTADLSRPFITARTTAIKGRFEGSRFLPYHTRNQINGGAL 240
Db 181 LVRIQTKNSGTTDNTGGTHTADLSRPFITARTTAIKGRFEGSRFLPYHTRNQINGGAL 240
Qy 241 DGKAPILGYAEDPVELPFMHVQSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMADKGYL 300
Db 241 DGKAPILGYAEDPVELPFMHVQSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMADKGYL 300
Qy 301 KLGQTSMOGIIKSYMRQNPORLAELVQNPSPYIFFRELAGSSNDGPGVAGLGTPLMGEYAGA 360
Db 301 KLGQTSMOGIIKAYMRQNPORLAELVQNPSPYIFFRELAGSSNDGPGVAGLGTPLMGEYAGA 360
Qy 361 VDRHYITLGAFLFVATAHPVTRKALNRLIMAQDTGSAIDGAVRVDYFWGYGDEAGELAGK 420
Db 361 VDRHYITLGAFLFVATAHPVTRKALNRLIMAQDTGSAIDGAVRVDYFWGYGDEAGELAGK 420
Qy 421 QKTTGYVWQLLPNGMKPEYRP 441
Db 421 QKTTGYVWQLLPNGMKPEYRP 441

RESULT 6

US-10-121-456A-1
; Sequence 1, Application US/10121456A
; Publication No. US20040013686A1
; GENERAL INFORMATION:
; APPLICANT: GRANOFF, Dan
; APPLICANT: MOE, Gregory
; APPLICANT: RAPUOLI, Rino
; TITLE OF INVENTION: MOLECULAR MIMETICS OF MENINGOCOCCAL B EPITOPES WHICH
; FILE REFERENCE: 2302-17782 / PPI7782.003
; CURRENT APPLICATION NUMBER: US/10/121,456A
; CURRENT FILING DATE: 2002-04-11
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: Patent In Ver. 2.0

```
; SEQ ID NO 1
; LENGTH: 441
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: exemplary GNA33
US-10-121-456A-1

Query Match      98.4%; Score 2302; DB 4; Length 441;
Best Local Similarity 99.4%; Pred. No. 9e-212;
Matches 434; Conservative 3; Mismatches 4; Indels 0; Gaps 0;

Qy 1 MKKYLFRALYGTAAAILAACQSKSIQTFPQDTSVINGPDRPVGI PDPAGTTVGGGAV 60
    |||
Db 1 MKKYLFRALCGIAAAILAACQSKSIQTFPQDTSVINGPDRPVGI PDPAGTTVGGGAV 60
    |||

Qy 61 YTVVPHLSLPHWAAQDFAKSLQSFRLGCANLKNRQGWODVCAQAFQTPVHVSFOAKOFFER 120
    |||
Db 61 YTVVPHLSLPHWAAQDFAKSLQSFRLGCANLKNRQGWODVCAQAFQTPVHVSFOAKOFFER 120
    |||

Qy 121 YFTPWQVAGNSLAGTGTGYEYEPVLKGDRTTAQARFPIYGI PDDFISVPLPAGLRSGKA 180
    |||
Db 121 YFTPWQVAGNSLAGTGTGYEYEPVLKGDRTTAQARFPIYGI PDDFISVPLPAGLRSGKA 180
    |||

Qy 181 LVRIQRTGKNSGTIDNTGGTHTADLSRFPITARTTAIKGRFEGSRFLPYHTRNQINGGAL 240
    |||
Db 181 LVRIQRTGKNSGTIDNTGGTHTADLSQFPITARTTAIKGRFEGSRFLPYHTRNQINGGAL 240
    |||

Qy 241 DGKAPILGYAEDPVELFFMHIOQSGRLKTPSGKYIRIGYADKNEHPVVSIGRYMADKGYL 300
    |||
Db 241 DGKAPILGYAEDPVELFFMHIOQSGRLKTPSGKYIRIGYADKNEHPVVSIGRYMADKGYL 300
    |||

Qy 301 KLQGTSMQGIKSYMRQNPORLAEVLGQNPYSYIFRELGSNDGPGVCGALGTPLMGEYAGA 360
    |||
Db 301 KLQGTSMQGIKAYMQNPORLAEVLGQNPYSYIFRELTSNDGPGVCGALGTPLMGEYAGA 360
    |||

Qy 361 VDRHYITLGAFLPVATAHPVTRKALNRLINMAQDTGSAIDGAVRDYVFWGYGDEAGELAGK 420
    |||
Db 361 VDRHYITLGAFLPVATAHPVTRKALNRLINMAQDTGSAIKGAVRDYVFWGYGDEAGELAGK 420
    |||

Qy 421 QKTTGYVWQLLPNGMKPEYRP 441
Db 421 QKTTGYVWQLLPNGMKPEYRP 441
```

```
RESULT 7
US-10-915-740A-999
; Sequence 999, Application US/10915740A
; Publication No. US20050191316A1
; GENERAL INFORMATION:
; APPLICANT: Frazer, Claire M.
; APPLICANT: Hickey, Erin
; APPLICANT: Peterson, Jeremy
; APPLICANT: Tettelin, Herve
; APPLICANT: Venter, J. Craig
; APPLICANT: Maignani, Vega
; APPLICANT: Galeotti, Cesira
; APPLICANT: Mora, Manroza
; APPLICANT: Ratti, Giulio
; APPLICANT: Scarselli, Maria
; APPLICANT: Scarlato, Vincenzo
; APPLICANT: Rappuoli, Rino
; APPLICANT: Pizza, Mariagrazia
; APPLICANT: Grandi, Guido
; TITLE OF INVENTION: Neisseria Genomic Sequences And Methods Of Their Use
; FILE REFERENCE: 002441.00090
; CURRENT APPLICATION NUMBER: US/10/915,740A
; CURRENT FILING DATE: 2004-08-11
; PRIOR FILING DATE: 1999-10-08
; PRIOR APPLICATION NUMBER: 09/806,866
; PRIOR FILING DATE: 1999-10-08
; PRIOR APPLICATION NUMBER: USSN 60/103,794
; PRIOR FILING DATE: 1998-10-09
```

```
; PRIOR APPLICATION NUMBER: USSN 60/132,068
; PRIOR FILING DATE: 1999-04-30
; PRIOR APPLICATION NUMBER: PCT/US99/25373
; PRIOR FILING DATE: 1999-10-08
; NUMBER OF SEQ ID NOS: 1068
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 999
; LENGTH: 441
; TYPE: PRT
; ORGANISM: Neisseria meningitidis
US-10-915-740A-999

Query Match      98.4%; Score 2302; DB 5; Length 441;
Best Local Similarity 98.4%; Pred. No. 9e-212;
Matches 434; Conservative 3; Mismatches 4; Indels 0; Gaps 0;

Qy 1 MKKYLFRALYGTAAAILAACQSKSIQTFPQDTSVINGPDRPVGI PDPAGTTVGGGAV 60
    |||
Db 1 MKKYLFRALCGIAAAILAACQSKSIQTFPQDTSVINGPDRPVGI PDPAGTTVGGGAV 60
    |||

Qy 61 YTVVPHLSLPHWAAQDFAKSLQSFRLGCANLKNRQGWODVCAQAFQTPVHVSFOAKOFFER 120
    |||
Db 61 YTVVPHLSLPHWAAQDFAKSLQSFRLGCANLKNRQGWODVCAQAFQTPVHVSFOAKOFFER 120
    |||

Qy 121 YFTPWQVAGNSLAGTGTGYEYEPVLKGDRTTAQARFPIYGI PDDFISVPLPAGLRSGKA 180
    |||
Db 121 YFTPWQVAGNSLAGTGTGYEYEPVLKGDRTTAQARFPIYGI PDDFISVPLPAGLRSGKA 180
    |||

Qy 181 LVRIQRTGKNSGTIDNTGGTHTADLSRFPITARTTAIKGRFEGSRFLPYHTRNQINGGAL 240
    |||
Db 181 LVRIQRTGKNSGTIDNTGGTHTADLSQFPITARTTAIKGRFEGSRFLPYHTRNQINGGAL 240
    |||

Qy 241 DGKAPILGYAEDPVELFFMHIOQSGRLKTPSGKYIRIGYADKNEHPVVSIGRYMADKGYL 300
    |||
Db 241 DGKAPILGYAEDPVELFFMHIOQSGRLKTPSGKYIRIGYADKNEHPVVSIGRYMADKGYL 300
    |||

Qy 301 KLQGTSMQGIKSYMRQNPORLAEVLGQNPYSYIFRELGSNDGPGVCGALGTPLMGEYAGA 360
    |||
Db 301 KLQGTSMQGIKAYMQNPORLAEVLGQNPYSYIFRELTSNDGPGVCGALGTPLMGEYAGA 360
    |||

Qy 361 VDRHYITLGAFLPVATAHPVTRKALNRLINMAQDTGSAIDGAVRDYVFWGYGDEAGELAGK 420
    |||
Db 361 VDRHYITLGAFLPVATAHPVTRKALNRLINMAQDTGSAIKGAVRDYVFWGYGDEAGELAGK 420
    |||

Qy 421 QKTTGYVWQLLPNGMKPEYRP 441
Db 421 QKTTGYVWQLLPNGMKPEYRP 441
```

```
RESULT 8
US-10-220-481-3
; Sequence 3, Application US/10220481
; Publication No. US20040110670A1
; GENERAL INFORMATION:
; APPLICANT: ARICO, Maria B., et al.
; TITLE OF INVENTION: Heterologous Expression of Neisserial Proteins
; FILE REFERENCE: CHIR-15883/01US
; CURRENT APPLICATION NUMBER: US/10/220,481
; CURRENT FILING DATE: 2003-05-05
; PRIOR APPLICATION NUMBER: PCT/IB01/00452
; PRIOR FILING DATE: 2001-02-28
; NUMBER OF SEQ ID NOS: 633
; SOFTWARE: Seqwin99, version 1.02
; SEQ ID NO 3
; LENGTH: 440
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: 919
US-10-220-481-3

Query Match      96.7%; Score 2262; DB 4; Length 440;
Best Local Similarity 97.3%; Pred. No. 6.2e-208;
```


Qy 141 YEPVLKGDRTTAQARFPIYIPDDFISVPLPAGLRSGKALVRIQTGKNSGTIDNTGGT 200
Db 532 YEPVLKGDRTTAQARFPIYIPDDFISVPLPAGLRSGKALVRIQTGKNSGTIDNTGGT 591
Qy 201 HTADLSRFPITARTTAIKRFGESRFLPYHTRNQINGGALDGKAPILGYAEDPVELPFMH 260
Db 592 HTADLSRFPITARTTAIKRFGESRFLPYHTRNQINGGALDGKAPILGYAEDPVELPFMH 651
Qy 261 IQSGRLKTPSGKYIRIGYADKNEHPYVSIQRYMADKGYLKGOTSMQGIKSYMRQNPOR 320
Db 652 IQSGRLKTPSGKYIRIGYADKNEHPYVSIQRYMADKGYLKGOTSMQGIKSYMRQNPOR 711
Qy 321 LAEVLGQNPSYIFFRELAGSSNDGPGVAGLTPLMGEYAGAVDRHYITLGAPLFVATAHPV 380
Db 712 LAEVLGQNPSYIFFRELAGSSNDGPGVAGLTPLMGEYAGAVDRHYITLGAPLFVATAHPV 771
Qy 381 TRKALNRLIMAQDTGSAIDGAVRDYFWGYGDEAGELAGKQKTTGYVWQLLPNGMKPEYR 440
Db 772 TRKALNRLIMAQDTGSAIKGAVRDYFWGYGDEAGELAGKQKTTGYVWQLLPNGMKPEYR 831
Qy 441 P 441
Db 832 P 832
RESULT 11
US-10-220-481-89
; Sequence 89, Application US/10220481
; Publication No. US20040110670A1
; GENERAL INFORMATION:
; APPLICANT: ARICO, Maria B., et al.
; TITLE OF INVENTION: Heterologous Expression of Neisserial Proteins
; FILE REFERENCE: CHIR-15883/01US
; CURRENT APPLICATION NUMBER: US/10/220,481
; CURRENT FILING DATE: 2003-05-05
; PRIOR APPLICATION NUMBER: PCT/IB01/00452
; PRIOR FILING DATE: 2001-02-28
; NUMBER OF SEQ ID NOS: 633
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 89
; LENGTH: 832
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: deltaG287-919
US-10-220-481-89

Query Match 95.6%; Score 2236; DB 4; Length 832;
Best Local Similarity 99.5%; Pred. No. 4.8e-205;
Matches 419; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 21 CQSKSIQTFPPQDTSVINGPDRPVGIPDPAGTTVGGGAVTVVPHLSLPHWAAQDFAKS 80
Db 412 CQSKSIQTFPPQDTSVINGPDRPVGIPDPAGTTVGGGAVTVVPHLSLPHWAAQDFAKS 471
Qy 81 LQSFRLGCANLKNRQGWQDVCAQAFQTPVHSFOAKQFFERYFTPWQVAGNSLAGTVTG 140
Db 472 LQSFRLGCANLKNRQGWQDVCAQAFQTPVHSFOAKQFFERYFTPWQVAGNSLAGTVTG 531
Qy 141 YEPVLKGDRTTAQARFPIYIPDDFISVPLPAGLRSGKALVRIQTGKNSGTIDNTGGT 200
Db 532 YEPVLKGDRTTAQARFPIYIPDDFISVPLPAGLRSGKALVRIQTGKNSGTIDNTGGT 591
Qy 201 HTADLSRFPITARTTAIKRFGESRFLPYHTRNQINGGALDGKAPILGYAEDPVELPFMH 260
Db 592 HTADLSRFPITARTTAIKRFGESRFLPYHTRNQINGGALDGKAPILGYAEDPVELPFMH 651
Qy 261 IQSGRLKTPSGKYIRIGYADKNEHPYVSIQRYMADKGYLKGOTSMQGIKSYMRQNPOR 320
Db 652 IQSGRLKTPSGKYIRIGYADKNEHPYVSIQRYMADKGYLKGOTSMQGIKSYMRQNPOR 711
Qy 321 LAEVLGQNPSYIFFRELAGSSNDGPGVAGLTPLMGEYAGAVDRHYITLGAPLFVATAHPV 380

Db 712 LAEVLGQNPSYIFFRELAGSSNDGPGVAGLTPLMGEYAGAVDRHYITLGAPLFVATAHPV 771
Qy 381 TRKALNRLIMAQDTGSAIDGAVRDYFWGYGDEAGELAGKQKTTGYVWQLLPNGMKPEYR 440
Db 772 TRKALNRLIMAQDTGSAIKGAVRDYFWGYGDEAGELAGKQKTTGYVWQLLPNGMKPEYR 831
Qy 441 P 441
Db 832 P 832
RESULT 12
US-10-220-480-10
; Sequence 10, Application US/10220480
; Publication No. US20040092711A1
; GENERAL INFORMATION:
; APPLICANT: Chiron SpA
; TITLE OF INVENTION: Hybrid Expression of Neisserial Proteins
; FILE REFERENCE: P026783WO
; CURRENT APPLICATION NUMBER: US/10/220,480
; CURRENT FILING DATE: 2000-02-28
; PRIOR APPLICATION NUMBER: GB 0004695.3
; PRIOR FILING DATE: 2000-02-28
; PRIOR APPLICATION NUMBER: GB 0027675.8
; PRIOR FILING DATE: 2000-11-13
; NUMBER OF SEQ ID NOS: 121
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 10
; LENGTH: 897
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: deltaG287NZ-919
US-10-220-480-10

Query Match 95.6%; Score 2236; DB 4; Length 897;
Best Local Similarity 99.5%; Pred. No. 5.4e-205;
Matches 419; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 21 CQSKSIQTFPPQDTSVINGPDRPVGIPDPAGTTVGGGAVTVVPHLSLPHWAAQDFAKS 80
Db 477 CQSKSIQTFPPQDTSVINGPDRPVGIPDPAGTTVGGGAVTVVPHLSLPHWAAQDFAKS 536
Qy 81 LQSFRLGCANLKNRQGWQDVCAQAFQTPVHSFOAKQFFERYFTPWQVAGNSLAGTVTG 140
Db 537 LQSFRLGCANLKNRQGWQDVCAQAFQTPVHSFOAKQFFERYFTPWQVAGNSLAGTVTG 596
Qy 141 YEPVLKGDRTTAQARFPIYIPDDFISVPLPAGLRSGKALVRIQTGKNSGTIDNTGGT 200
Db 597 YEPVLKGDRTTAQARFPIYIPDDFISVPLPAGLRSGKALVRIQTGKNSGTIDNTGGT 656
Qy 201 HTADLSRFPITARTTAIKRFGESRFLPYHTRNQINGGALDGKAPILGYAEDPVELPFMH 260
Db 657 HTADLSRFPITARTTAIKRFGESRFLPYHTRNQINGGALDGKAPILGYAEDPVELPFMH 716
Qy 261 IQSGRLKTPSGKYIRIGYADKNEHPYVSIQRYMADKGYLKGOTSMQGIKSYMRQNPOR 320
Db 717 IQSGRLKTPSGKYIRIGYADKNEHPYVSIQRYMADKGYLKGOTSMQGIKSYMRQNPOR 776
Qy 321 LAEVLGQNPSYIFFRELAGSSNDGPGVAGLTPLMGEYAGAVDRHYITLGAPLFVATAHPV 380
Db 777 LAEVLGQNPSYIFFRELAGSSNDGPGVAGLTPLMGEYAGAVDRHYITLGAPLFVATAHPV 836
Qy 381 TRKALNRLIMAQDTGSAIDGAVRDYFWGYGDEAGELAGKQKTTGYVWQLLPNGMKPEYR 440
Db 837 TRKALNRLIMAQDTGSAIKGAVRDYFWGYGDEAGELAGKQKTTGYVWQLLPNGMKPEYR 896
Qy 441 P 441
Db 897 P 897


```
RESULT 13
US-10-220-481-95
; Sequence 95, Application US/10220481
; Publication No. US20040110670A1
; GENERAL INFORMATION:
; APPLICANT: ARICO, Maria B., et al.
; TITLE OF INVENTION: Heterologous Expression of Neisserial Proteins
; FILE REFERENCE: CHIR-15883/01US
; CURRENT APPLICATION NUMBER: US/10/220,481
; CURRENT FILING DATE: 2003-05-05
; PRIOR APPLICATION NUMBER: PCT/IB01/00452
; PRIOR FILING DATE: 2001-02-28
; NUMBER OF SEQ ID NOS: 633
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 95
; LENGTH: 897
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: deltaG287NZ-919
US-10-220-481-95

Query Match          95.6%; Score 2236; DB 4; Length 897;
Best Local Similarity 99.5%; Pred. No. 5.4e-205;
Matches 419; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 21 CQSKIQTFFPQDTSVINGPDRPVGIPDPAGTIVGGGGAVTVVPHLSLPHWAAQDFAKS 80
Db 477 CQSKIQTFFPQDTSVINGPDRPVGIPDPAGTIVGGGGAVTVVPHLSLPHWAAQDFAKS 536

Qy 81 LQSFRLGCANLKNRGQWQDVCAQAFQTPVHSFQAKQFFERYFTPWQVAGNSLAGTVTGY 140
Db 537 LQSFRLGCANLKNRGQWQDVCAQAFQTPVHSFQAKQFFERYFTPWQVAGNSLAGTVTGY 596

Qy 141 YEPVLKGDRTTAQARFPIYIPDDFISVPLPAGLRSGKALVRIQTGKNSGTIDNTGGT 200
Db 597 YEPVLKGDRTTAQARFPIYIPDDFISVPLPAGLRSGKALVRIQTGKNSGTIDNTGGT 656

Qy 201 HTADLSRPPITARTTAIKGRFEGSRFLPYHTNRQINGGALDGKAPILGYAEDPVELFFMH 260
Db 657 HTADLSRPPITARTTAIKGRFEGSRFLPYHTNRQINGGALDGKAPILGYAEDPVELFFMH 716

Qy 261 IQSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMADKGYLKGQTSMOGIIKSYMQRNPQR 320
Db 717 IQSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMADKGYLKGQTSMOGIIKSYMQRNPQR 776

Qy 321 LAEVLGQNPSTIFFRELAGSSNDGPGVAGLGTPLMGEYAGAVDRHYITILGAPLFVATAHPV 380
Db 777 LAEVLGQNPSTIFFRELAGSSNDGPGVAGLGTPLMGEYAGAVDRHYITILGAPLFVATAHPV 836

Qy 381 TRKALNRLIMAQDTGSAIDGAVRVDFYFWGYGDEAGELAGKQKTGTYVWQLLPNGMKPEYR 440
Db 837 TRKALNRLIMAQDTGSAIKGAVRVDFYFWGYGDEAGELAGKQKTGTYVWQLLPNGMKPEYR 896

Qy 441 P 441
Db 897 P 897

RESULT 14
US-10-220-481-2
; Sequence 2, Application US/10220481
; Publication No. US20040110670A1
; GENERAL INFORMATION:
; APPLICANT: ARICO, Maria B., et al.
; TITLE OF INVENTION: Heterologous Expression of Neisserial Proteins
; FILE REFERENCE: CHIR-15883/01US
; CURRENT APPLICATION NUMBER: US/10/220,481
; CURRENT FILING DATE: 2003-05-05
; PRIOR APPLICATION NUMBER: PCT/IB01/00452
; PRIOR FILING DATE: 2001-02-28
; NUMBER OF SEQ ID NOS: 633
; SOFTWARE: SeqWin99, version 1.02

; SEQ ID NO 2
; LENGTH: 420
; TYPE: PRT
; ORGANISM: Neisseria meningitidis
US-10-220-481-2

Query Match          95.2%; Score 2227; DB 4; Length 420;
Best Local Similarity 99.5%; Pred. No. 1.3e-204;
Matches 418; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 22 QSKIQTFFPQDTSVINGPDRPVGIPDPAGTIVGGGGAVTVVPHLSLPHWAAQDFAKSL 81
Db 1 QSKIQTFFPQDTSVINGPDRPVGIPDPAGTIVGGGGAVTVVPHLSLPHWAAQDFAKSL 60

Qy 82 QSFRLGCANLKNRGQWQDVCAQAFQTPVHSFQAKQFFERYFTPWQVAGNSLAGTVTGY 141
Db 61 QSFRLGCANLKNRGQWQDVCAQAFQTPVHSFQAKQFFERYFTPWQVAGNSLAGTVTGY 120

Qy 142 EPLVKGDRTTAQARFPIYIPDDFISVPLPAGLRSGKALVRIQTGKNSGTIDNTGGTH 201
Db 121 EPLVKGDRTTAQARFPIYIPDDFISVPLPAGLRSGKALVRIQTGKNSGTIDNTGGTH 180

Qy 202 TADLSRPPITARTTAIKGRFEGSRFLPYHTNRQINGGALDGKAPILGYAEDPVELFFMH 261
Db 181 TADLSRPPITARTTAIKGRFEGSRFLPYHTNRQINGGALDGKAPILGYAEDPVELFFMH 240

Qy 262 QSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMADKGYLKGQTSMOGIIKSYMQRNPQR 321
Db 241 QSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMADKGYLKGQTSMOGIIKSYMQRNPQR 300

Qy 322 AEVLGQNPSTIFFRELAGSSNDGPGVAGLGTPLMGEYAGAVDRHYITILGAPLFVATAHPV 381
Db 301 AEVLGQNPSTIFFRELAGSSNDGPGVAGLGTPLMGEYAGAVDRHYITILGAPLFVATAHPV 360

Qy 382 RKALNRLIMAQDTGSAIDGAVRVDFYFWGYGDEAGELAGKQKTGTYVWQLLPNGMKPEYR 441
Db 361 RKALNRLIMAQDTGSAIKGAVRVDFYFWGYGDEAGELAGKQKTGTYVWQLLPNGMKPEYR 420

RESULT 15
US-10-220-481-8
; Sequence 8, Application US/10220481
; Publication No. US20040110670A1
; GENERAL INFORMATION:
; APPLICANT: ARICO, Maria B., et al.
; TITLE OF INVENTION: Heterologous Expression of Neisserial Proteins
; FILE REFERENCE: CHIR-15883/01US
; CURRENT APPLICATION NUMBER: US/10/220,481
; CURRENT FILING DATE: 2003-05-05
; PRIOR APPLICATION NUMBER: PCT/IB01/00452
; PRIOR FILING DATE: 2001-02-28
; NUMBER OF SEQ ID NOS: 633
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 8
; LENGTH: 194
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: 919.pcp
US-10-220-481-8

Query Match          43.4%; Score 1015; DB 4; Length 194;
Best Local Similarity 99.5%; Pred. No. 9.3e-89;
Matches 193; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 239 ALDGKAPILGYAEDPVELFFMHIOGSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMADK 298
Db 1 ALDGKAPILGYAEDPVELFFMHIOGSGRLKTPSGKYIRIGYADKNEHPYVSIGRYMADK 60

Qy 299 YLKGQTSMOGIIKSYMQRNPORLAEVLGQNPSTIFFRELAGSSNDGPGVAGLGTPLMGEYA 358
Db 61 YLKGQTSMOGIIKSYMQRNPORLAEVLGQNPSTIFFRELAGSSNDGPGVAGLGTPLMGEYA 120
```

```
QY 359 GAVDRHYITLGAFLVATAPVTRKALNRLIMAQDTGSAIDGAVRVDFYFWGYGDEAGELA 418
Db 121 GAVDRHYITLGAFLVATAPVTRKALNRLIMAQDTGSAIKGAVRVDFYFWGYGDEAGELA 180
QY 419 GKQKTTGYVWQLLP 432
Db 181 GKQKTTGYVWQLLP 194

RESULT 16
US-10-415-017-2
; Sequence 2, Application US/10415017
; Publication No. US20040043456A1
; GENERAL INFORMATION:
; APPLICANT: Thonnard, Joelle
; TITLE OF INVENTION: BASB209 Polypeptides and Polynucleotides
; FILE REFERENCE: BM45427
; CURRENT APPLICATION NUMBER: US/10/415,017
; CURRENT FILING DATE: 2003-04-24
; PRIOR APPLICATION NUMBER: PCT/EP01/12391
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: GB 0025997.8
; PRIOR FILING DATE: 2000-10-24
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 367
; TYPE: PRT
; ORGANISM: non-typeable Haemophilus influenzae
US-10-415-017-2

Query Match 13.5%; Score 316.5; DB 4; Length 367;
Best Local Similarity 24.5%; Pred. No. 2.6e-21;
Matches 117; Conservative 58; Mismatches 142; Indels 161; Gaps 16;

QY 1 MKKYLFRALYGIAAAILAACQSKSIQTFPPDTSVINGDPRPVGIP-DPAGTTVGGGA 59
Db 2 LKPFWFKTFSIITALLVACTSNTKNT-----QIPTTNGSDPPQFGA 45
QY 60 VYT-----VPHLSLPHWAA-----QDFAKSLQSFRLGCANLKNRQGWQDVCAQAFQT 107
Db 46 KYTNRTYQQTALVPVSVYENQSAVINQGFDTQL-----SNIKN----- 84
QY 108 PVHSFOAKQFFERY--FTPWQVAG-----NGSLAGTVTGYEPLVK 146
Db 85 -YSSKLSNFDVNEKTNWVLSGANINELTQFNIOPIQIMRGFDGFQNLMTGYSPILY 143
QY 147 GDDRRTAQAARPIYIGIPDDFISVPLPAGLSRSGKALVRIQTGKNSGTIDNTGGTHTADLS 206
Db 144 ARHSPQGFQKNPIYRMP-----SRAQIYAGALTGKRELAYSDSMLENFFLLGVQSGY 201
QY 207 RFPITARTTAIKGRFEGSRFLPYHTRNQINGALDGKAPILGYAEDPVELFFMHIOQSGR 266
Db 161 -----VKKRL-----SRAQIYAGALTGKRELAYSDSMLENFFLLGVQSGY 201
QY 267 LKTPSGKYIRIGYADKNEHPYVSIGRYMDKGYLKGQTSMQGKSYMRQNPORLAELVLG 326
Db 202 VDFGDGNLNFYFAYAGQNGPYTAIGRLLVDEGEIPKEKMSIQAIREWGNRNPSPVQSILLE 261
QY 327 QNPSYIIFRELAGSSND--GPV-GALGTPLMGEYAGAVDRHYITLGAFLFVAT----- 376
Db 262 RNEAYVFFK-----NDPSGKVKSAGVPLVAMASVASDRNIIPSGSVLLVEVPDIDNNG 315
QY 377 ----AHPVTRKALNRLIMAQDTGSAIDGAVRVDFYFWGYGDEAGELAGKQKTTGYVWQL 430
Db 316 NWIGTHKL-----HLMVALDVGGAVKGH-HFDLYRGIGARAGHAGLSKHYGRVWL 366

RESULT 17
US-10-415-017-6
; Sequence 6, Application US/10415017
; Publication No. US20040043456A1
; GENERAL INFORMATION:
; APPLICANT: Thonnard, Joelle
; TITLE OF INVENTION: BASB209 Polypeptides and Polynucleotides
; FILE REFERENCE: BM45427
; CURRENT APPLICATION NUMBER: US/10/415,017
; CURRENT FILING DATE: 2003-04-24
; PRIOR APPLICATION NUMBER: PCT/EP01/12391
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: GB 0025997.8
; PRIOR FILING DATE: 2000-10-24
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 367
; TYPE: PRT
; ORGANISM: non-typeable Haemophilus influenzae
US-10-415-017-6

Query Match 13.5%; Score 316.5; DB 4; Length 367;
Best Local Similarity 24.5%; Pred. No. 2.6e-21;
Matches 117; Conservative 58; Mismatches 142; Indels 161; Gaps 16;

QY 1 MKKYLFRALYGIAAAILAACQSKSIQTFPPDTSVINGDPRPVGIP-DPAGTTVGGGA 59
Db 2 LKPFWFKTFSIITALLVACTSNTKNT-----QIPTTNGSDPPQFGA 45
QY 60 VYT-----VPHLSLPHWAA-----QDFAKSLQSFRLGCANLKNRQGWQDVCAQAFQT 107
Db 46 KYTNRTYQQTALVPVSVYENQSAVINQGFDTQL-----SNIKN----- 84
QY 108 PVHSFOAKQFFERY--FTPWQVAG-----NGSLAGTVTGYEPLVK 146
Db 85 -YSSKLSNFDVNEKTNWVLSGANINELTQFNIOPIQIMRGFDGFQNLMTGYSPILY 143
QY 147 GDDRRTAQAARPIYIGIPDDFISVPLPAGLSRSGKALVRIQTGKNSGTIDNTGGTHTADLS 206
Db 144 ARHSPQGFQKNPIYRMP-----SRAQIYAGALTGKRELAYSDSMLENFFLLGVQSGY 201
QY 207 RFPITARTTAIKGRFEGSRFLPYHTRNQINGALDGKAPILGYAEDPVELFFMHIOQSGR 266
Db 161 -----VKKRL-----SRAQIYAGALTGKRELAYSDSMLENFFLLGVQSGY 201
QY 267 LKTPSGKYIRIGYADKNEHPYVSIGRYMDKGYLKGQTSMQGKSYMRQNPORLAELVLG 326
Db 202 VDFGDGNLNFYFAYAGQNGPYTAIGRLLVDEGEIPKEKMSIQAIREWGNRNPSPVQSILLE 261
QY 327 QNPSYIIFRELAGSSND--GPV-GALGTPLMGEYAGAVDRHYITLGAFLFVAT----- 376
Db 262 RNEAYVFFK-----NDPSGKVKSAGVPLVAMASVASDRNIIPSGSVLLVEVPDIDNNG 315
QY 377 ----AHPVTRKALNRLIMAQDTGSAIDGAVRVDFYFWGYGDEAGELAGKQKTTGYVWQL 430
Db 316 NWIGTHKL-----HLMVALDVGGAVKGH-HFDLYRGIGARAGHAGLSKHYGRVWL 366
```

```
; GENERAL INFORMATION:
; APPLICANT: Thonnard, Joelle
; TITLE OF INVENTION: BASB209 Polypeptides and Polynucleotides
; FILE REFERENCE: BM45427
; CURRENT APPLICATION NUMBER: US/10/415,017
; CURRENT FILING DATE: 2003-04-24
; PRIOR APPLICATION NUMBER: PCT/EP01/12391
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: GB 0025997.8
; PRIOR FILING DATE: 2000-10-24
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 367
; TYPE: PRT
; ORGANISM: non-typeable Haemophilus influenzae
US-10-415-017-6

Query Match 13.5%; Score 316.5; DB 4; Length 367;
Best Local Similarity 24.5%; Pred. No. 2.6e-21;
Matches 117; Conservative 58; Mismatches 142; Indels 161; Gaps 16;

QY 1 MKKYLFRALYGIAAAILAACQSKSIQTFPPDTSVINGDPRPVGIP-DPAGTTVGGGA 59
Db 2 LKPFWFKTFSIITALLVACTSNTKNT-----QIPTTNGSDPPQFGA 45
QY 60 VYT-----VPHLSLPHWAA-----QDFAKSLQSFRLGCANLKNRQGWQDVCAQAFQT 107
Db 46 KYTNRTYQQTALVPVSVYENQSAVINQGFDTQL-----SNIKN----- 84
QY 108 PVHSFOAKQFFERY--FTPWQVAG-----NGSLAGTVTGYEPLVK 146
Db 85 -YSSKLSNFDVNEKTNWVLSGANINELTQFNIOPIQIMRGFDGFQNLMTGYSPILY 143
QY 147 GDDRRTAQAARPIYIGIPDDFISVPLPAGLSRSGKALVRIQTGKNSGTIDNTGGTHTADLS 206
Db 144 ARHSPQGFQKNPIYRMP-----SRAQIYAGALTGKRELAYSDSMLENFFLLGVQSGY 201
QY 207 RFPITARTTAIKGRFEGSRFLPYHTRNQINGALDGKAPILGYAEDPVELFFMHIOQSGR 266
Db 161 -----VKKRL-----SRAQIYAGALTGKRELAYSDSMLENFFLLGVQSGY 201
QY 267 LKTPSGKYIRIGYADKNEHPYVSIGRYMDKGYLKGQTSMQGKSYMRQNPORLAELVLG 326
Db 202 VDFGDGNLNFYFAYAGQNGPYTAIGRLLVDEGEIPKEKMSIQAIREWGNRNPSPVQSILLE 261
QY 327 QNPSYIIFRELAGSSND--GPV-GALGTPLMGEYAGAVDRHYITLGAFLFVAT----- 376
Db 262 RNEAYVFFK-----NDPSGKVKSAGVPLVAMASVASDRNIIPSGSVLLVEVPDIDNNG 315
QY 377 ----AHPVTRKALNRLIMAQDTGSAIDGAVRVDFYFWGYGDEAGELAGKQKTTGYVWQL 430
Db 316 NWIGTHKL-----HLMVALDVGGAVKGH-HFDLYRGIGARAGHAGLSKHYGRVWL 366

RESULT 18
US-10-415-017-10
; Sequence 10, Application US/10415017
; Publication No. US20040043456A1
; GENERAL INFORMATION:
; APPLICANT: Thonnard, Joelle
; TITLE OF INVENTION: BASB209 Polypeptides and Polynucleotides
; FILE REFERENCE: BM45427
; CURRENT APPLICATION NUMBER: US/10/415,017
; CURRENT FILING DATE: 2003-04-24
; PRIOR APPLICATION NUMBER: PCT/EP01/12391
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: GB 0025997.8
; PRIOR FILING DATE: 2000-10-24
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 367
; TYPE: PRT
; ORGANISM: non-typeable Haemophilus influenzae
US-10-415-017-10
```

[illegible]

```
Qy 208 FPIITARTTAIKRFGESRFLPYHTRNQINGSGALDKAPILGYAEDPVELFFMHIIQSGSRL 267
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 161 -----VKRL-----SRAQIYAGALAGKRELAYSDSMLENFLILGVLGGSSYV 202
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 268 KTPSGKVIIRGYADKNEHPYVSGRYMADKGYLKLQTSMQGKSYMRQNPORLAELVIGQ 327
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 203 DFGDGNLNYFAYAGONGPYTAIGRLIVDEGEIPKEKXSIQAIRESNRPNSRVQSLLER 262
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 328 NPSYIFPRELAGSSND-GPV-GALGTPLMGEYAGAVDRHYITLGAFLFVAT----- 376
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 263 NEAVVFK-----NDPSGKVGSGGVLPLVAMASVADSHNIIIPSGSVLLVEVPDIDNNGN 316
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 377 ---AHPVTRKALNRLIMAQDTGSAIDGAVRVDFYFWGYGDEAGELAGKQKTTGYVWQL 430
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 317 WIGTHKL-----HLMVALDVGGAVKGH-HFDLYRGIGARAGHTIAGLSKHVGRVWL 366

RESULT 21
US-10-220-481-9
; Sequence 9, Application US/10220481
; Publication No. US20040110670A1
; GENERAL INFORMATION:
; APPLICANT: ARICO, Maria B., et al.
; TITLE OF INVENTION: Heterologous Expression of Neisserial Proteins
; FILE REFERENCE: CHIR-15883/01US
; CURRENT APPLICATION NUMBER: US/10/220,481
; CURRENT FILING DATE: 2003-05-05
; PRIOR APPLICATION NUMBER: PCT/IB01/00452
; PRIOR FILING DATE: 2001-02-28
; NUMBER OF SEQ ID NOS: 633
; SOFTWARE: SeqWin99, version 1.02
; SEQ ID NO 9
; LENGTH: 196
; TYPE: PRT
; ORGANISM: Escherichia coli
; US-10-220-481-9

Query Match 10.2%; Score 238.5; DB 4; Length 196;
Best Local Similarity 35.2%; Pred. No. 3.2e-14;
Matches 68; Conservative 25; Mismatches 87; Indels 13; Gaps 6;

Qy 246 ILGYAEDPVELFFMHIIQSGSRLKTPSGKYIR-IGYADKNEHPYVSGRYMADKGYLKLQ 304
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 7 ILAYNSLMDNFIMDVQSGYIDFGDGSPLNFFSYAGKNGHAYRSIGKVLIDRGEVKED 66
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 305 TSMQGIKSYMRQNPQ-RLAEVLGONPSYIFPRELAGSSNDGPV-GALGTPLMGEYAGVD 362
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 67 MSMQAIIRHWGETHSEAEVRELLEQNPSFVFFK----PQSFAPVKGASAVPLVGRASVAD 122
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 363 RHYITLGAFLFVATAHPVTRKALN-----RLIMAQDTGSAIDGAVRVDFYFWGYGDEAGEL 417
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 123 RSIIPPGTTLAEVPLLDNNGKFGQYELRLMVALDVGGAIKQG-HFDIYQIGPEAGHR 181
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 418 AGKQKTTGYVWQL 430
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 182 AGWNYHGRVWL 194
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

RESULT 22
US-10-450-763-54683
; Sequence 54683, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
```

```
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 54683
; LENGTH: 1118
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (670)..(718)
; OTHER INFORMATION: CHEMOTAXIS CHEW PROTEIN domain identified by eMATRIX,
; OTHER INFORMATION: accession number DM01794, p-value=1.000e-40, raw score of 26.50
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (664)..(803)
; OTHER INFORMATION: Chew-like domain identified by Pfam, accession name CheW, E-
; OTHER INFORMATION: value=6.5e-53, Pfam score of 189.2
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1118)
; OTHER INFORMATION: Xaa = X or * as defined in Table 2
US-10-450-763-54683

Query Match 9.6%; Score 225.5; DB 5; Length 1118;
Best Local Similarity 35.7%; Pred. No. 6.9e-12;
Matches 65; Conservative 22; Mismatches 82; Indels 13; Gaps 6;

Qy 257 FFMHIQSGSRLKTPSGKYIR-IGYADKNEHPYVSGRYMADKGYLKLQTSMQGIKSYMR 315
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 935 FIMDVQSGYIDFGDGSPLNFFSYAGKNGHAYRSIGKVLIDRGEVKEDMSMQAIRHWGE 994
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 316 QNPQ-RLAEVLGONPSYIFPRELAGSSNDGPV-GALGTPLMGEYAGAVDRHYITLGAFLF 373
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 995 THSEAEVRELLEQNPSFVFFK----PQSFAPVKGASAVPLVGRASVASDSRIIPPGTTL 1050
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 374 VATAHPVTRKALN-----RLIMAQDTGSAIDGAVRVDFYFWGYGDEAGELAGKQKTTGYVW 428
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 1051 AEVPLLDNNGKFGQYELRLMVALDVGGAIKQG-HFDIYQIGPEAGHRAGWNYHGRVW 1109
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 429 QL 430
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 1110 VL 1111
      :|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

RESULT 23
US-10-450-763-59399
; Sequence 59399, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 59399
; LENGTH: 628
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (23)..(126)
; OTHER INFORMATION: FAD binding domain identified by Pfam, accession name
; OTHER INFORMATION: FAD_binding_2, E-value=5.6e-21, Pfam score of 76.2
; FEATURE:
; NAME/KEY: misc_feature
```

; LENGTH: 440
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_2866C.1.pcp
US-10-424-599-206691

Query Match 4.7%; Score 111; DB 4; Length 440;
Best Local Similarity 21.6%; Pred. No. 0.18;
Matches 75; Conservative 47; Mismatches 96; Indels 130; Gaps 19;

QY 133 LAGTVGYGPEVLKGD-----DRTTAQAQRPPIYGIPDDFTISVPLPAG----- 174
|||:::|
Db 158 LOGTIVLVLPFAPEGAGAKIILDAGALDNVT--AIFGLHVPD-----IPVGGEVASRS 209
:::|
QY 175 --LRSKGALVRIRQTGNKSGTIDNTGTHTA--DLSPFITARTATLKRFEGSRFLPYH 230
|||:::|
Db 210 GPLSASGVFEAKISK-----GCHAAIQLSIDPILATNVI----- 247
:::|
QY 231 TRNQINGALDGGAPILGYAEDPVLEFPMHIQSGRLKTPSGKYIRIGYADKNBHPYYSI 290
:::|
Db 248 -----ISLQHSLVSREADPLDLTFACKLG-----GGAFIVI-----FPYVVTI 283
:::|
QY 291 GRYMADKGYIKLQTSMOGHSKSYMRQNQRLAELVQG-----NPSY---- 331
|||:::|
Db 284 G-----GTFRAFSGREKLEQLKRIKQ-----VVIGQAAYQRCNATVNFIDETRPSYPT 332
:::|
QY 332 -----IPFRELAGSSNDGP--VGALGTPLMGE-----YAGAVDRHYITLGAPLFVATA 377
|||:::|
Db 333 VNNGDLPKLFVDVAGNLL-GPNVNTEKTPIMAEADFPAEQVEIPGVFIMLG-----VKSA 387
:::|
QY 378 HPVTRKALNR--LIMAQDT---GSAIDGAVRDVDFWYMGDEAGELACK 420
|||:::|
Db 388 SPEPHQSLSHPYLKISEDALPYGAALHASLATSYYLLRYQQDVAKVWGCK 435
:::|

RESULT 26
US-10-282-122A-56343
; Sequence 56343, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangshu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22

```

; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 56343
; LENGTH: 676
; TYPE: PRT
; ORGANISM: Enterobacter cloacae
US-10-282-122A-56343

Query Match
Best Local Similarity 4.6%; Score 108; DB 4; Length 676;
Matches 91; Conservative 40; Mismatches 112; Indels 178; Gaps 23;

QY 119 ERYFTPMQVAGNSLACTVTCYEPVLKGGDRRTAQARFPIYGIPDDFISVPLPAG--- 174
Db 9 EKHSgp-QYLAEGSKSVFING--QPAVRAKDRITCE-----GTVSDVSPNVIIGDTL 59
QY 175 ----LRSGK-----ALVRIQTKGNSGTIDN-----TGCTHTADL-----SR 207
Db 60 TVRDIKSGKTPGLAIGMALISLLR--GRPGKILKNMPCALAAAGGMLADMAVNAVFSS 117
QY 208 FPITART-----TAIKRFP-----EG-----SRFLPYHTRNQ 234
Db 118 HPVHAATGVKVLNDDDELDLDFSLPGRFPLRMQRSYNSLTTRBGLFGLGWATTFDSYLTLED 177
QY 235 INGGALDGKAPILGYAEDDPVELPFMH1QGGSLKTPSGKYIRIGYADKNHPVYSIGRYM 294
Db 178 NNATWFDETGRELSFELPPVDRAFYIS-----EGIIIR-----RNENGDAVIA--- 221
QY 295 ADKGYLKLQTSMQGIKSYMRQNRPQRLAEVLGQNPYSYIFFRELAGSSNDGVPVGLGTPLM 354
Db 222 DDDG-----SVWRLYKPTRANPSIL--RLASLSDE-----YGNALL 255
QY 355 GEYAGAVDRHYITLGAFLFVATAHPVTRKALNRLIMAQDGTSAIDGAVRVD----- 405
Db 256 TEW-----DEH-----GRLVGLHDEPRAIDVTLRYDDDERFPQVPT 290
QY 406 ---VF-----WGYGDEAGELAGKQKTTG-----YVWOLLPMGMKPEY 439
Db 291 AASHFDGSHTWPLMWQY--DARGQLASATDASGVVTRYREYNEHGLMWHRMPCGLESEY 349
QY 440 R 440
Db 350 R 350

```

RESUL.T 27

```

US-10-484-218-22
; Sequence 22, Application US/10484218
; Publication No. US20050059633A1
; GENERAL INFORMATION:
; APPLICANT: VAN GEEL-SCHUTTEN, GERRITDINA HENDRIKA
; TITLE OF INVENTION: GLUCANS AND GLUCANSUCCEASES DERIVED FROM
; TITLE OF INVENTION: LACTIC ACID BACTERIA
; FILE REFERENCE: 2001-1316
; CURRENT APPLICATION NUMBER: US/10/484,218
; CURRENT FILING DATE: 2004-01-20
; PRIORITY APPLICATION NUMBER: PCT/NL02/00495
; PRIOR FILING DATE: 2002-07-22
; PRIOR APPLICATION NUMBER: EP 01202752.0
; PRIOR FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: EP 01202841.1
; PRIOR FILING DATE: 2001-07-25
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 22
; LENGTH: 1006
; TYPE: PR1
; ORGANISM: Lactobacillus fermentum

```

```

US-10-484-218-22

Query Match          4.5%; Score 106; DB 5; Length 1006;
Best Local Similarity 21.6%; Pred. No. 1.7;
Matches 102; Conservative 49; Mismatches 150; Indels 172; Gaps 27;

Qy 35 SVINGPRPVGIPDPAGTTVGCGGAYVTV--PHLS--LPHW-----AAQDFAKSIQSFR 85
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 411 TIYNDDDAPIRYTDNKGDLIETFNHDVYGLNPNQVSGFLAMVMVPTGAPANQD-ARSTASTN 469
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 86 L---GCANLKNRQGWQVCAQAFQTPVHSFOAQFFERYFT-----PWQVAG- 129
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 470 MSTQGSAYHSNAALDSQVIFESFS---NFOAMPSTSHDTYTNVVLNHAHDQLHDWGITSV 525
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 130 -----NGSLAGTV-----TGYYEPVLKGDRRRTAAQAFPIYG----- 161
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 526 QLAQVRSSTDGTFDLAIQNGYAFTDRVDLGFGTPTKYGDDTDLRNVIKALHANGMQVM 585
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 162 ---IPDFEISVPLPAGLRSGKALVRIOTGKNSGIDNTGGTHTADLSRFPITARTAIK 218
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 586 ADFVPDQLYTLTP-----GKELVQVTRT-NNMGSPD-----TH-SDIQHI-LVVTSTRGG 631
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 219 GRPE---GSREL-----PVHTRNQINGGALDGKAPILGYAEDPVELFFMHIOQSGRLL 267
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 632 GDYQKQYGEFLARLRYRYPDLFTTRQISTG-----QTIDDSVKI 671
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 268 KTPSGKYIRIGYADKNQHEHPYVISIGRYMADKGVKLGQTSMQGKSYMRONPQRLAEVLQG 327
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 672 KEWSAKY-----LNGTAIQG-----RGAGYVLRD 695
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 328 NPSYIFRELAGSSNDG---PVGALGTPLM-GEVAGAVDRHIVITLGAPLFVATAHPVTR 382
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 696 NGTNWAYKVTHA---NDGNVNLPKQLLGQPVMTGTFHEADGYHFELSG-----T 741
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 383 KALNRLIMAOGTSAIDGAVRDVYFWGDEAGELAGKQKTTGYVMQLLPNGM 435
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 742 SAKDAFIMGD-----DCAL---YY--PDDQGVMTVGKQVRHQDYFFFLPNGI 783
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 28
US-10-369-493-17897
; Sequence 17897, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 17897
; LENGTH: 503
; TYPE: PRT
; ORGANISM: SPHINGOMONAS
; US-10-369-493-17897

```

Db 153 PIGRCORELIGDROTKTAVAITFQINQGNASDDOKKLCFYVAI-GQKST--VA 209
Qy 229 YHTRNQINGGALDGKAPILGVAEDVELFFMHIOGSGRLKTPSGKYIRIGYADKNEHPYV 288
Db 210 QIVROLEBENGAMEYSIVVAATASEAPLQFL-----APYT 244
Qy 289 --SIGRYMADKGY-----LKLQOTSMOGIKSYMRONPORLAEBVLQONPSYIFF----- 334
Db 245 GCAMEYFRDNGMHAVIVYDDLSKQAVAYROMSLRLRRPPGREA-----YFGDVFLHSR 299
Qy 335 -RELAGSND-----GPGVAGLGTPLMGEYAGVDRHYIT-----LGAFLFVAT--AHPVTR 382
Db 300 LLERAANKNDANGSSSLTAL--PILETQGDVSAIPIVNVISITDGOIFLETLNLFYQGI 357
Qy 383 KALNRLMAQDTGSA-----IDGAVRVDY-----FWGYGDEAGELAGKQKTTGY 426
Db 358 PAINVGLSVSRVSSAQTAMKVKVSGSIKLELAQVREMAAFQFGSDLD--ASTQKLLNR 415
Qy 427 VWQLLPNGMKPEYRP 441
Db 416 GARLTLLKQPOFSP 430

RESULT 29

US-10-282-122A-52178

; Sequence 52178, Application US/10282122A

; Publication No. US20040029129A1

; GENERAL INFORMATION:

; APPLICANT: Wang, Liangsu

; APPLICANT: Zamudio, Carlos

; APPLICANT: Malone, Cheryl

; APPLICANT: Haselbeck, Robert

; APPLICANT: Ohlsen, Kari

; APPLICANT: Zyskind, Judith

; APPLICANT: Wall, Daniel

; APPLICANT: Trawick, John

; APPLICANT: Carr, Grant

; APPLICANT: Yamamoto, Robert

; APPLICANT: Forsyth, R.

; APPLICANT: Xu, H.

; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms

; FILE REFERENCE: ELITRA 034A

; CURRENT APPLICATION NUMBER: US/10/282,122A

; CURRENT FILING DATE: 2003-02-20

; PRIOR FILING DATE: 2000-03-21

; PRIOR FILING DATE: 2000-03-21

; PRIOR FILING DATE: 2000-05-23

; PRIOR FILING DATE: 2000-05-26

; PRIOR FILING DATE: 2000-09-06

; PRIOR FILING DATE: 2000-09-09

; PRIOR FILING DATE: 2000-09-09

; PRIOR FILING DATE: 2000-10-23

; PRIOR FILING DATE: 2000-10-23

; PRIOR FILING DATE: 2000-11-27

; PRIOR FILING DATE: 2000-11-27

; PRIOR FILING DATE: 2000-12-22

; PRIOR FILING DATE: 2000-12-22

; PRIOR FILING DATE: 2001-02-09

; PRIOR FILING DATE: 2001-02-09

; PRIOR FILING DATE: 2001-02-16

; PRIOR FILING DATE: 2001-02-16

; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 78614

; SOFTWARE: Patent in version 3.1

; LENGTH: 463

; TYPE: PRT

; ORGANISM: Clostridium botulinum

US-10-282-122A-52178

Query Match 4.4%; Score 102; DB 4; Length 463;
Best Local Similarity 22.0%; Pred. No. 1.4;
Matches 74; Conservative 51; Mismatches 121; Indels 90; Gaps 18;
Qy 129 GNGSLAGVTGTYGYPVLKGGDDRRRTAQARFPYIGIPDDFISVPLPAGLRSGKALVRIROTG 188
Db 72 GEGBYGVGLGHLDLVPEGDG-----WKYPYIG-----AEIHGKMYGR----- 110
Qy 189 KNSGTIDNTG-----GTHTADLSRFPITARTTAIKGRPE--GSRFLPYHTRNQ--IN 236
Db 111 ---GTTDDKGPIAALYGLKAIESKPLSKVIRILFGTNEETSGSKETHEVLEKEKPPVL 167
Qy 237 GGALDGRAPILGYAEDPVLEF-----FMHIQSGRLKTPSGKYIRIGYADKNEHPYVSI 291
Db 168 GFTPDAPYPII--YAEKGITIFDVVKKLEIKSKAIDL---KYIKGGEASNMVDPDYCEAGI 223
Qy 292 -----RYMADKGYLKLGTSMQGI-----KSYMRONPORL 321
Db 224 ECPDTDMIIRSLVCANRNGIELTAEEKGLLVIKSFGLSAHGSTPEIGKNAIMQPKFL 283
Qy 322 AEV-LG--QNPSYI--FPRELASSNDGPGVAGLGTPLMGEYAGVDRHYITIGAP-----L 372
Db 284 AELPLGHCDLQFIRFFNNVNGNETDGK--TFGVELEDEPSGKLSFNVTISMENNKIRM 341
Qy 373 FVATAHPVTRKALNRLMAQDTGSAIDG-AVRVDYF 407
Db 342 SLNLRYPVTVKSED---LMEXFNKKIDGTGKIVENF 374

RESULT 30

US-10-282-122A-55128

; Sequence 55128, Application US/10282122A

; Publication No. US20040029129A1

; GENERAL INFORMATION:

; APPLICANT: Wang, Liangsu

; APPLICANT: Zamudio, Carlos

; APPLICANT: Malone, Cheryl

; APPLICANT: Haselbeck, Robert

; APPLICANT: Ohlsen, Kari

; APPLICANT: Zyskind, Judith

; APPLICANT: Wall, Daniel

; APPLICANT: Trawick, John

; APPLICANT: Carr, Grant

; APPLICANT: Yamamoto, Robert

; APPLICANT: Forsyth, R.

; APPLICANT: Xu, H.

; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms

; FILE REFERENCE: ELITRA 034A

; CURRENT APPLICATION NUMBER: US/10/282,122A

; CURRENT FILING DATE: 2003-02-20

; PRIOR FILING DATE: 2000-03-21

; PRIOR FILING DATE: 2000-03-21

; PRIOR FILING DATE: 2000-05-23

; PRIOR FILING DATE: 2000-05-26

; PRIOR FILING DATE: 2000-09-06

; PRIOR FILING DATE: 2000-09-06

; PRIOR FILING DATE: 2000-09-09

; PRIOR FILING DATE: 2000-09-09

; PRIOR FILING DATE: 2000-10-23

; PRIOR FILING DATE: 2000-10-23

; PRIOR FILING DATE: 2000-11-27

; PRIOR FILING DATE: 2000-11-27

; PRIOR FILING DATE: 2000-12-22

; PRIOR FILING DATE: 2000-12-22

; PRIOR FILING DATE: 2001-02-09

; PRIOR FILING DATE: 2001-02-09

; PRIOR FILING DATE: 2001-02-16

; PRIOR FILING DATE: 2001-02-16

; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 78614

; SOFTWARE: Patent in version 3.1

```
; SEQ ID NO 55128
; LENGTH: 627
; TYPE: PRT
; ORGANISM: Chlamydia trachomatis
US-10-282-122A-55128

Query Match      4.4%; Score 102; DB 4; Length 627;
Best Local Similarity 22.1%; Pred. No. 2.1;
Matches 69; Conservative 39; Mismatches 114; Indels 90; Gaps 15;

Qy 77 FAKSLQSFRLGCANLKNRQGWQVCAQAFQTPVHSFOAKOF-PERYFTPWQVAGNSLAG 135
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 63 FAKQAQAIQKRFPRSKIQTDFLIYALAF-AAVLAFLIQWFELYEVP----- 110
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 136 TVTGYEPEVLKGGDR-----RTAQAREPI---YGIPDDFIS-----VPLP--- 172
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 111 --TGSMPRTILEQDRILVSKTTFGLRLPFSNESIGYTPETITRGELVFTVGGDLPIFNAD 168
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 173 ---AGLRSGKALVRIQTGKNSGTIDNTGG-THTADLSRFPITARTTAIKRFEGRFLP 228
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 169 TKYFGIIPGKKRYIKRCMKPGDLYFYGGKIYGIDRNGVPIITTKNT-----ENLYHIP 222
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 229 YHTRNQINGGALDGKADILGYAEDPVELPFMHIOGSGRLKTPSGKYIRIGYADKNEHPYV 288
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 223 YI-----SFDGVTEIVNHSDDQTDVIF-----NQFHTPCGKI-----SFPHY 259
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 289 SIGRYMADKGYLK-----LGQTSMQGIKSY-----MRQNPQRLAEVLGONPS 330
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 260 SHGQFFYKDWHKDTPTYALKDLHTPELSYADLFGIKNFAMVRIILTKQAALTHVL-SSPL 318
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 331 YIFPRELAGSSN 342
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Qy 319 ADAYLEIAHTPN 330
Db   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : :
```

Search completed: December 30, 2005, 08:28:40
Job time : 167 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 30, 2005, 08:25:13 ; Search time 26 Seconds
(without alignments)

1402.307 Million cell updates/sec

Title: US-09-914-454B-31

Perfect score: 2340

Sequence: 1 MKKYLFRALYGIAAIIAA.....KTTGVVWLLPNCMKPEYRP 441

Scoring table:

BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.*

- 1: /cgn2_6/ptodata/1/iaa/5 COMB.pep.*
- 2: /cgn2_6/ptodata/1/iaa/6 COMB.pep.*
- 3: /cgn2_6/ptodata/1/iaa/H COMB.pep.*
- 4: /cgn2_6/ptodata/1/iaa/PTCUS COMB.pep.*
- 5: /cgn2_6/ptodata/1/iaa/RE COMB.pep.*
- 6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	605.5	25.9	396	2	US-09-252-991A-19425
2	314.5	13.4	367	2	US-09-489-039A-10054
3	275	11.8	365	2	US-09-543-681A-6366
4	112	4.8	577	2	US-09-252-991A-25632
5	110.5	4.7	342	2	US-09-270-767-45316
6	102.5	4.4	1190	2	US-09-252-991A-21474
7	100	4.3	3562	2	US-09-679-279-14
8	98.5	4.2	543	2	US-09-902-540-15614
9	98.5	4.2	986	2	US-08-311-731A-2
10	98.5	4.2	1616	2	US-09-712-363-262
11	98	4.2	1053	2	US-09-252-991A-24665
12	98	4.2	3567	1	US-07-642-734C-4
13	98	4.2	3567	2	US-08-439-009A-4
14	97.5	4.2	457	2	US-09-252-991A-30850
15	96.5	4.1	1118	2	US-09-252-991A-32439
16	95.5	4.1	548	2	US-08-487-183A-12
17	95.5	4.1	1803	2	US-09-902-540-15978
18	95	4.1	1411	2	US-09-252-991A-23628
19	94.5	4.0	548	1	US-07-903-047-8
20	94.5	4.0	548	1	US-08-460-934-2
21	94.5	4.0	548	1	US-08-782-118-2
22	94.5	4.0	548	2	US-09-111-752-14
23	94.5	4.0	548	2	US-09-380-061B-16
24	94.5	4.0	548	2	US-08-487-183A-14
25	94.5	4.0	548	2	US-09-396-154-28
26	94.5	4.0	548	2	US-09-581-241A-4
27	94.5	4.0	548	2	US-09-581-241A-6

28	94.5	4.0	548	2	US-09-581-241A-8	Sequence 8, Appli
29	94.5	4.0	568	1	US-08-460-934-6	Sequence 6, Appli
30	94.5	4.0	568	1	US-08-782-118-6	Sequence 6, Appli
31	94.5	4.0	636	1	US-08-460-934-9	Sequence 9, Appli
32	94.5	4.0	636	1	US-08-782-118-9	Sequence 9, Appli
33	94.5	4.0	1569	2	US-09-711-164-312	Sequence 312, App
34	94	4.0	503	2	US-09-134-001C-4214	Sequence 4214, Ap
35	94	4.0	503	2	US-09-710-279-1810	Sequence 1810, Ap
36	93.5	4.0	548	2	US-09-602-628-10	Sequence 10, Appl
37	93.5	4.0	561	2	US-09-252-991A-20870	Sequence 20870, A
38	93.5	4.0	597	2	US-09-477-135A-129	Sequence 129, App
39	93	4.0	541	2	US-09-252-991A-27743	Sequence 27743, A
40	93	4.0	5087	2	US-09-144-085-1	Sequence 1, Appli
41	92.5	4.0	548	1	US-07-675-211-2	Sequence 2, Appli
42	92.5	4.0	548	1	US-07-903-047-2	Sequence 2, Appli
43	92.5	4.0	548	1	US-08-076-042-2	Sequence 2, Appli
44	92.5	4.0	548	1	US-09-380-061B-14	Sequence 14, Appl
45	92.5	4.0	548	2	US-09-396-154-27	Sequence 27, Appl

ALIGNMENTS

RESULT 1

US-09-252-991A-19425
; Sequence 19425, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; PRIOR FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 19425
; LENGTH: 396
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-19425

Query Match		25.9%	Score 605.5;	DB 2;	Length 396;
Best Local Similarity		33.7%	Pred No. 1e-54;		
Matches 143;		Conservative 60;	Mismatches 154;	Indels 67;	Gaps 10;
QY	15	AAIIAACQSKSIQTFFPPQDTSVINGPDRPVGIPDPAGTTVGGGGAVYTVVPHLSLPHWAA	74		
Db	30	AALLTACD-----DGKEPP--PKPAEVT-----TNSVPMDALPATSD	66		
QY	75	QDFAKSLQSPFLGCANLKNROGWQDVCAQAQTVPVHSFQAQFFERYTTPQV--AGNGS	132		
Db	67	ADLLAGFNWASACARLAKDPVWGEPCCASATTAADPTAVRAFLQRMQVYSLRSSNGD	126		
QY	133	LAGTVGYEVPVKGDDRRRTAAQAFPIYIGIPDDFISVPLPAGLRSGKALVRIRQTGKNSG	192		
Db	127	-QGLITGYEVPVYHGSLSQGEKTPVPYGVFDDLVVALES-----VYPELKGK--	175		
QY	193	TIDTGGTHTADLSRFPITARTTAIKGRFEGSRFLPYHTRNQI--NGGALDGKAPILGYA	250		
Db	176	-----LGRLEGRVLKPYDDAATIRNGSS---APVLAWL	207		
QY	251	EDPVLPFMHTQSGRLKTPSGKIRIGYADKNEHPYISIRYMAKDGKYLKLGQTSMQGI	310		
Db	208	GDPMDLQFLQIGSGRIQLEDGRQLRIGYQNGHPYKPVGRWLVEQGLVPKEEISMKRI	267		
QY	311	KSYMRQNPORLAELVGNQNPVSIFFEELAGSNDGPGVAGLTPLMGEYAGAVDRHYITLGA	370		
Db	268	RDWAEANPQVSELLASNPVSFF--SLRPDSDESPRGSINVLPTDGYVSVALDKRVPUGS	326		

Db 244 AAGAGAGGAGCAAGAGARRSAGHLAAGPARLALGLRPVADRAAAGRLGAA---QRAG 300
Qy 97 WQDVCAQA---PQTPVHFSQAQKQFFERYFTPWQVA-- 128
Db 301 LPWPAGRAAPAPARGAAHAGRASGIAGDRRLGAGAHPLHLYRA---VPRQGRPGRLGGP 357
Qy 129 -----GNGLAGTGTGYEYVPLKGDRTTAQARFPYIGIPDFISV-----PLPAG 174
Db 358 GPAGIQRORGGNLAGRAGRAPAPAAADPGOPGAVRRGAGAVPGRSLELAGVRPPLG 417
Qy 175 L-----RSGKALVRI---ROTGNSTIDNTGGTHTA-----DLSRFP 209
Db 418 ADVWRGDAADRUGRRRGRGRRPGVDGRLGEPGHRRRSVGWHGVAALGQRDAALDP 477
Qy 210 ITARTTAIKRPEG-----SRF-----LPYHTRNQINGGALDGKAPILGYAEDPVELFF 258
Db 478 ATADRL---GRRAGLGQCRAPFRPRPARLPGQIVRAPESGAIDGAAP----- 521
Qy 259 MHIQSGRLKTPSGKYIRIGVADKN-----EHPYVIGRYMADKGYLKQOTS 306
Db 522 ----GKGKKAAGLRTFIHLGYLDKRSVNIHRVEIPAVTWRSAMQORNPISLRRTS 572

RESULT 5
US-09-270-767-45316
; Sequence 45316, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of *Drosophila melanogaster*
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 45316
; LENGTH: 342
; TYPE: PRT
; ORGANISM: *Drosophila melanogaster*
; FEATURE:
; OTHER INFORMATION: Xaa means any amino acid
US-09-270-767-45316

Query Match 4.7%; Score 110.5; DB 2; Length 342;
Best Local Similarity 23.9%; Pred. No. 0.0076;
Matches 60; Conservative 25; Mismatches 107; Indels 59; Gaps 11;

Qy 8 AALGIAAAILAACQSKSIQTFPPQDPTSVINGPD-RPVGIIDPAGTTVGGGAVTVVPH 66
Db 58 ACTVAFARAQFAACGGGAQXQXDDQLWVDSAEILPVAVPRPAQQRGGASGDPTPKS 117
Qy 67 LSL---PHWA-----AQDFAKSLQSFRLGCANLKNRQGWQVCAQAFQTPVHFSQAQKFF 118
Db 118 LALNQNHYPAGSDTSGQEELDSRYECA-----ICIDWLNPEVLTSCGHRFC 167
Qy 119 ERYFTPWQVAGN-----GSLAGTGTGYEYVPLKGDRTTAQARFP-----IYG-- 161
Db 168 RSLCTAWQKNNQCCPMDNKRLSARHLSGQ---LHAPDRATQARLPQLLAGLFGC 223
Qy 162 -----IPDDFISVPLPAGLSGKALV---RIRQTKGNSGIDNTGG-----THYAD 204
Db 224 LAHRTASPSAQLSLAAAGAGGVEVPQDQVFCGPTRD--QSVGGAPQGRHAASHAD 281
Qy 205 LSRPPIARTT 215
Db 282 ABAFOQTAT 292

RESULT 6
US-09-252-991A-21474
; Sequence 21474, Application US/09252991A
; Patent No. 6551795

; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 21474
; LENGTH: 1190
; TYPE: PRT
; ORGANISM: *Pseudomonas aeruginosa*
US-09-252-991A-21474

Query Match 4.4%; Score 102.5; DB 2; Length 1190;
Best Local Similarity 22.2%; Pred. No. 0.35;
Matches 76; Conservative 33; Mismatches 126; Indels 107; Gaps 18;

Qy 30 POPDTSVINGDPRPVGIP--DPA-----GTTVGGGAVTVVPHLSLPHMAAQDFA--- 78
Db 412 PYPOA---NPSAEYWNPRNDPATWQHVMVYTLGLG-----LTTSLTSPKWEGSTYSGY 463
Qy 79 KLSQSFRLGCANLKNRQ-----WQ-----DVCQAQFQTPVHFSQAQKFF 117
Db 464 DEIAAGRLSWPNASNNHNSNVYDLWHAAVNSRGEFFSADSPQLVAAFQDILNRISGKDL 523
Qy 118 -----FERYFTPWQVAGNSLACTGTGYEYVPLKGDRTTAQARFP 158
Db 524 PASRPAISSLSQEDDTGDKLTFAYQTSFASDKKMGADLTRY---SLTTQDKRATVTK-- 578
Qy 159 IYGIPTDDFISVPLPAGLSGKALVRIOTGK-NSGTIDNTGGTHAD---LSRFPITAR 213
Db 579 LWSAQSLDAMP-----NGGAGRKIMWAGSGTSLKEFTWGSLSADQORQLNRDPDRND 632
Qy 214 TTAIKR-----FEGSRFLP-----YHTRNQINGGALD-----GKAPILGYAEDPVELFF 258
Db 633 VADTKGQDRVAFRLGRDSKNSDNPRTRNSILGDIINSPPATVGAQVLTLYLAQPIE--- 689
Qy 259 MHIQSGRLKTPSGKYIRIGVADKNEHPYVIGRYMADKGYL 300
Db 690 -----PSGNYSTFAEAQKTRAPRVYVG---ANDGML 717

RESULT 7
US-09-679-279-14
; Sequence 14, Application US/09679279
; Patent No. 6524841
; GENERAL INFORMATION:
; APPLICANT: McDaniel, Robert
; APPLICANT: Volchegursky, Yanina
; TITLE OF INVENTION: Recombinant Megalomicin Biosynthetic
; FILE REFERENCE: 300622004700
; CURRENT APPLICATION NUMBER: US/09/679,279
; CURRENT FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/158,305
; PRIOR FILING DATE: 1999-10-08
; PRIOR APPLICATION NUMBER: US 60/190,024
; PRIOR FILING DATE: 2000-03-17
; NUMBER OF SEQ ID NOS: 34
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 3562
; TYPE: PRT
; ORGANISM: *Micromonospora megalomicea*
US-09-679-279-14

Query Match 4.3%; Score 100; DB 2; Length 3562;
Best Local Similarity 20.5%; Pred. No. 3.5;

Matches 104; Conservative 57; Mismatches 155; Indels 192; Gaps 28;

QY 8 AALYGIAAAIILAAQCSKSIQTFFPDPTSVI--NGPDRPVGIPDPAGTIV-----S 54
Db 2752 AAVWG-----VLRCQAQES-----PDRFVLVDGDPETPPAVDPNPQLAVRAGVAVFVPRLT 2801
QY 55 -----GGGAVYTV-----VPHLSLPHMAAQDPAKSLQ-----SPR--- 85
Db 2802 PLAGPVPAVADRAVRLVPGNGGSLEAVAFAPVPDADRP-LAPEVRVAVRATGVNFRDVL 2860
QY 86 --LGCANLKNRQGDVCAQAFQTPVHSFOAKOFFERYFTFMQVAGNSLAGTVGYEP 143
Db 2861 LALGMYPEPAEMGTE--ASCVVTEVGS-----GVRFTPGQ-----AVTGLFQGAFGP 2906
QY 144 VLKGDRTTAQARFPIGIDP-----DFISVPLP-----AGLRSGKALV---RI 184
Db 2907 VAVADHRL-----LTFPVDGWRVADAAPVIAFTTAHVALHDLAQGQSVLVHAAA 2959
QY 185 ROTGKNSGTIDNTGGTH---TADLSRFP-----ITARTTAIKGRF---EGSRF 226
Db 2960 GGVCMAVALARRAGAEVFATASPAKHTLRALGLDDHIIASSRESGFGERFAARTGGRG 3019
QY 227 LPYHTRNQINGALDQKAPILGYAEDVELFFMHIOGSGRLKTPSGKYIRIGYADKNEHP 286
Db 3020 VDV-VLNSLTGDLID-----ESARLLADGGVFVEMGKTDLRPAE 3057
QY 287 YVSGRY----MADKGYLKGQTSMQGIKSYMRQNPORLAEVLGNPYSIFFRELAGSSN 342
Db 3058 QFR-GRYVPFDLABAG-----PDLRGEIL----- 3080
QY 343 DGPVGLGTPLMGYAGAVDRHYITL---GAPLFVATAHPVTRKALNRLIMAQDTGSAI 398
Db 3081 BEVUGLLA-----AGALDELPSVWELSNAP--AALTHMSGRHVGKLVLTQAPVHP 3131
QY 399 DGAVRVDYFWGYGDEAGELAGKQKTTY 426
Db 3132 DGTVLVT---GGTGLRLVARHLVTVGH 3156

RESULT 8

US-09-902-540-15614
; Sequence 15614, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15949)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 15614
; LENGTH: 543
; TYPE: PRN
; ORGANISM: Myxococcus xanthus
US-09-902-540-15614

Query Match 4.2%; Score 98.5; DB 2; Length 543;
Best Local Similarity 19.5%; Pred. No. 0.28;
Matches 94; Conservative 59; Mismatches 158; Indels 171; Gaps 26;

QY 14 AAALIAACQSKSIQTFFPDPTSVINGDRPVGIPDPAGTIVGGGAVYTVVPHLSLPHWA 73
Db 13 AAALAAAG-----PQETS-----BEE-----TAPESQVPAGA 41
QY 74 AQDPAKSLQSFRLGCANLKNRQGDVCAQAFQTPVHSFOAKOFFERYFTFMQVAGNS 132
Db 42 VDDAARAVADAARTPNELDAQFTK--AAGFNVFVSLKAIKSYAE---TRWEHVRGEE 96

QY 133 LAGTVTGYEPVLKGDRTTAQARFPIYGDIPDPFISVPLPAGLRSGKALVRIQRTGKNSG 192
Db 97 FEGRPAAFGLLALRGQLITDGA--LAGYSADAVRDEPLANLEAGAALL-----S 144
QY 193 TIDNTGGTHTADLSRF-PITARTTAIKRFEGRFLPYHTRNQINGALDQKAPILGYAE 251
Db 145 KYADEAGIDRADLGAWAPVAVRLTDI-----S 171
QY 252 DP-VELPFMH-----IQSGRLKTPSGKYIRIGYADKNEHPVVSIGRYMADKGYLKL 303
Db 172 DPDIQAHYIHNDVSVLRREGAGAF-TPAGK-VAVSLESTQVNP-----KFA 215
QY 304 QTSMQGIKSYMRQNPORLAEVLGNPYSIFFRELAGSSNDGPVGCALGTPLM-----GEY 357
Db 216 LPNQALAA---GPDYAAASIRPSPNY-----NARPAG-IQQMVVVIHTCEGGY 260
QY 358 AG-----AVDRHYIT-----LGAPLFVATAHPVTRKALNRLIMAQDT 394
Db 261 SGCWSMLTNSAAGVSAHYVNVNESGTEVSQLVRESSRAHWVAAAY---RSSLNGGVKSNLN 317
QY 395 G-SALDGAVRVDYFWGYGDEAGELAGKQKTTYV-----WOLLPNG-MKPE 438
Db 318 GRSTNDFSIGIEH-GGYASSASFSTGMTTSKLTCTNITRDQGIIPRDSYHIVAHRLQPE 376
QY 439 YR 440
Db 377 TR 378

RESULT 9

US-08-311-731A-2
; Sequence 2, Application US/08311731A
; Patent No. 6583266
; GENERAL INFORMATION:
; APPLICANT: SMITH, DOUGLAS
; APPLICANT: MAO, JEN-I
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES
; TITLE OF INVENTION: RELATING TO MYCOBACTERIUM TUBERCULOSIS AND LAPRAE FOR
; TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 411
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: WOLF, GREENFIELD & SACKS, P.C.
; STREET: 600 ATLANTIC AVENUE
; CITY: BOSTON
; STATE: MASSACHUSETTS
; COUNTRY: USA
; ZIP: 02210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/311,731A
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: GATES, EDWARD R.
; REGISTRATION NUMBER: 31,616
; REFERENCE/DOCKET NUMBER: C0044/7125
; TELEPHONE: 617/720-3500
; TELEFAX: 617/720-2441
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 986 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: YES
; ORIGINAL SOURCE:
; ORGANISM: MYCOBACTERIUM TUBERCULOSIS
US-08-311-731A-2

Query Match	4.2%; Score 98.5; DB 2; Length 986;
Best Local Similarity	21.2%; Pred. No. 0.7;
Matches 101; Conservative 55; Mismatches 173; Indels 147; Gaps 25;	
Qy	27 QTFPPQDTSVIN--GPD RPVGIPDPAGTTCGGGAVTV-VPHLSLPHWAQAQDFAKSLQS 83 : : Db
Dq	329 QSLAPAEAMVVMGLKORP-----ELASALGAAGQVFTIGVP-----VQMSAV-FAGS---- 375 : : Qy
Qy	84 FRLGCANLNKGQHODVCAQAFQTPVHSFOAQKFERYFTPWQVAGNSLGATVTGYVEP 143 : : Db
Dq	376 -----GGRVV-----QLPTVAFORRFEW---TP-GADGPADAAGLGLGATEH 414 : : Qy
Qy	144 VLKG-----DDRRTAAQEPIYICP-----DDFISVPLPAGLRSKAL 181 : : Db
Dq	415 ALLGAVVERPDSDEVLTGRLSLADQPWLADHVNVGVVLFPAGGFVELIIRAGDEVGCL 474 : : Qy
Qy	182 VRIQTGKNSTGIDNTGGTHADLSRF-P-IARTTAIKGRPE--GSRELPVHTTRNQINGG 238 : : Db
Dq	475 IEEL-----VLAAPLVHPGVGVQVVVGADESHRAVSIVSRCDQSOG 520 : : Qy
Qy	239 ALDGKAPILGY-AEDPVLEPFMIHQSGRLKTSPGKYIRIGYADKNEHPYVSIQRYMAD 296 : : Db
Dq	521 WLLNAEGLMGVAAAETPMDLISWPPEGAESVD-----ISDGYAQ-----LAE 562 : : Qy
Qy	297 KGYLKLQTSMOGIKSYMRQNPQRLAEV-----LGNPSYI-----FF 334 : : : Db
Dq	563 RGYAY--GPAPQGILVALWRRGSELF AEVAPGEAGVADRWMGMHPAVILDVHLHALGLAVE 620 : : : Qy
Qy	335 RELAGSSNDGPVGLGTPLMCEYAGADVDRHYITLCAPLFW-----ATAHPV--TRKALNR 387 : : : Db
Dq	621 KTOASTETRLPFCWRGVSVLHAGGAGRVRARFASGADAI SVDVCDATGLPVLTVRSLVTR 680 : : : Qy
Qy	388 LIMAQDTGSAIDGARVVDYFWGYGD ELAGLKAGTKTTGYVWOLL-----PNGMKP 437 : : : Db
Dq	681 PITAEOLRAAVTAA-----GGASDOGLE-----VWWSPTFSWGSGANGAP 722 : : :

```

RESULT 10
US-09-712-363-262
; Sequence 262, Application US/09712363
; Patent No. 6892139
; GENERAL INFORMATION:
; APPLICANT: Eisenberg, David
; APPLICANT: Rotstein, Sergio H.
; APPLICANT: Marcotte, Edward M.
; TITLE OF INVENTION: DETERMINING THE FUNCTIONS AND
; TITLE OF INVENTION: INTERACTIONS OF PROTEINS BY COMPARATIVE ANALYSIS
; FILE REFERENCE: 07419-032001
; CURRENT APPLICATION NUMBER: US/09/712,363
; CURRENT FILING DATE: 2000-11-13
; PRIOR APPLICATION NUMBER: PCT/US00/02246
; PRIOR FILING DATE: 2000-01-28
; PRIOR APPLICATION NUMBER: 60/179,531
; PRIOR FILING DATE: 2000-02-01
; PRIOR APPLICATION NUMBER: 60/117,844
; PRIOR FILING DATE: 1999-01-29
; PRIOR APPLICATION NUMBER: 60/118,206,
; PRIOR FILING DATE: 1999-02-01
; PRIOR APPLICATION NUMBER: 60/126,593
; PRIOR FILING DATE: 1999-03-26
; PRIOR APPLICATION NUMBER: 60/134,093
; PRIOR FILING DATE: 1999-05-14
; PRIOR APPLICATION NUMBER: 60/134,092
; PRIOR FILING DATE: 1999-05-14
; PRIOR APPLICATION NUMBER: 60/165,124
; PRIOR FILING DATE: 1999-11-12
; PRIOR APPLICATION NUMBER: 60/165,086
; PRIOR FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 262
; LENGTH: 1616

```

```
; TYPE: PRt
; ORGANISM: Mycobacterium tuberculosis
US-09-712-363-262

Query Match          4.2%; Score 98.5; DB 2; Length 1616;
Best Local Similarity 21.2%; Pred. No. 1.5; Indels 147; Gaps 25
Matches 101; Conservative 55; Mismatches 173;

Qy      27 QTFPPDPTSVIN--GPDPRVGPIDPAGTIVGGGAVTYV-VPHLSLPHWAAODFAKSLQS 83
       :|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|
Db      360 QSLAPAEAMVVMLGKDRP-----ELASALCAAGQVFTTGVF---VQWSAV-FAGS--- 406

Qy      84 FRLCANLKRRQHWDYCAQAFOFPVLISFOAKQPFERYFTPWQVAGNCSLAGTVGYYPEP 143
       :|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|
Db      407 -----CGRRV-----QLTYAFORRRFE---TP-GADGPADAAGLGIGATEH 445

Qy      144 VLKG-----DDRRTAQRPIYGIP-----DDFISVPPLAGLRSGKAL 181
       :|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|
Db      446 ALLGANVERPDSDEVLTGRULSLAQDWLAHDHVNVGVLPFGAGEVELVRAGDEVCAL 505

Qy      182 VRIRQTGNKSOTIDNTGCTHTADIASRPF-ITARTTAIKGRPE--GSREFLPYHTRNQINGG 238
       :|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|
Db      506 IEEL-----VLAAPLVMPHGCVQOVVVVGAADESCHRAVSUYSRGDQSQSG 551

Qy      239 ALDGKAPILY--ABDPVEILFMHIQGSGRLKTPSGKIYRIGYADKNHEPHYVISIARYMAD 296
       :|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|
Db      552 WLLNAEGLMGVAATAETPMDLISVPPEGAESVD-----ISDGYAQ-----LAE 593

Qy      297 KYILKLGTSMOGTKSYWRQNQPRLAEV-----LQNPSYI-----FF 334
       :|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|
Db      594 RGAY--GPAFOGLVAIWRRGESELFEAEPVAFGEAGVADRNGMHPIAVLDVLHALGLAVE 651

Qy      335 RELAGSSNDGPGVALGTGPLMCHEYAGADVDRHYITIGAPLFI---ATAHPV--TRKALNR 387
       :|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|
Db      652 KTOASTETRIFPCWRGYSUHLGAGGAGRVARPASAGADAI SVDVCDATGLPVLT VRSLVTR 711

Qy      388 LIMAQDTGSAIDGAVRVVDYFWMGYGDEAGELAGKQKTTGYVWQLL-----PNGMKP 437
       :|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|::||:|
Db      712 PITAFOLRAAVTAR-----GGASDQGFLE-----VMWSPT SVWGSCANGSP 753
```

```

RESULT 11
US-09-252-991A-24665
; Sequence 24665, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 24665
; LENGTH: 1053
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-24665

```

	Query Match	4.2%	Score 98;	DB 2;	Length 1053;
	Best Local Similarity	21.7%;	Pred.	No. 0.87;	Mismatches
	Matches	81;	Conservative	41;	Mismatches 117; Indels 134; Gaps 20
Qy	127 VAGNGSLAGTGYGVEPVLGDDRRRTAAQRPIYGIPLPDFISVPLPAGLRSGKAL-VRIR	185	:	:	:
Dd	135 IARTGAFRGRDGGYPDVRG-----ADARIALAQ-----EPAAEELGEAVDDRQA	180	:	:	:
Qy	186 QTGNKSQTINDMTGGTH-----TAD-----LSRFPTITATTAIK	218	:	:	:

Db 181 QPGATPNSLGGVEGFRHTAQGFLVHAAAGVADQAQADIVARCEAMGIVRRHPLVAR----- 235
QY 219 GREFSRFLPY--HTRNQINGGALDGKAPILGYAEDVELFFWHIOGSGRLKTPSGKYIR 276
Db 236 -----GKDDAPAVGHGAVGKGVDGQFELVGVGQAEVE-----IQKARL-----DRYAR 282
QY 277 I-GYADKNEHPYVSIG-----RYMADKGYLKGOT-----SMQGI-----K 311
Db 283 SQGMDQGVHPAQOVGDRAGRIETLLAGEGKHPLGQVGAALGGLQVLQVGVGALVAGQ 342
QY 312 SYMRQ-----NPORLAEVLGQNSYI-----FFRELAG-----SSNDGPGVALGTPL 353
Db 343 AFLQOPEAADHROQVVVEVGHAAAGEVPGQIHLHLLGLEQLLAGPQFAFGFDPVGDV-TGY 401
QY 354 MGE-----YAGAVDRHYITLGRPLFVATAPVTRKALNRLINAQDTGSAIDGAVRDY 406
Db 402 LGEADQPAIADVADRIDH-----VGPEATAVLAHPA-----FLLETPF 440
QY 407 FWGYGDEAGELAG 419
Db 441 AFGGQAAGRLAG 453

RESULT 12

US-07-642-734C-4
; Sequence 4, Application US/07642734C
; Patent No. 5824513
; GENERAL INFORMATION:
; APPLICANT: Katz, L
; APPLICANT: Donadio, S
; APPLICANT: Mcalpine, J B
; TITLE OF INVENTION: Recombinant DNA Method for Producing
; TITLE OF INVENTION: Erythromycin Analogs
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Edward H. Gorman
; STREET: Abbott Laboratories D377/AP6D-2 One Abbott
; CITY: Park Rd
; CITY: Abbott Park
; STATE: IL
; COUNTRY: US
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/642,734C
; FILING DATE: 17-JAN-91
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Dancakers, Andreas M
; REGISTRATION NUMBER: 32652
; REFERENCE/DOCKET NUMBER: 4952.US.01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 708-937-9396
; TELEFAX: 708-938-2623
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3567 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-07-642-734C-4

Query Match 4.2%; Score 98; DB 1; Length 3567;
Best Local Similarity 21.9%; Pred. No. 5.7;
Matches 106; Conservative 50; Mismatches 144; Indels 184; Gaps 29;
QY 8 AALYGIAAIILACQSKSIQTFPPDPTSVING-----PDRP-----VGIPD----- 48
Db 2759 AAMWG----VIRCAQAESPDRLVLLDTDAEFGLPFAVPDNPQLALRGDDVFPRLSLIAP 2814

QY 49 -----PAGT--TVGGGGVVTV-----VPHLSLPHWAAQ-----DPAKSLQSPR-----LGCA 89
Db 2815 SALTPLPAGTORLVPDGAIDSAVAFEPAPDVEQPLRAGEVRVDVTRATGVNFRDVLALGMY 2874
QY 90 NLKNRQGMQDV-CAQAFQTPVHSFOAKOFFERYFTPMQVAGNSLAGTGTGTYGYPVLKGD 148
Db 2875 POKADMGTAAAGVVTAVGPDVDAF-----APGDRVLGLFQGAFAPIAVTD 2919
QY 149 DRRTAQARFPFIYGTPD-----DFTISVPLP-----AGLSRGK----- 179
Db 2920 HRLLAR-----VPDGWSDADAAAVPIAVTTHAYALHDLAGLRAGOSVLIHAAAGVGVM 2972
QY 180 -ALVRIROQTG-----KNSGTIDNTG--GTHTADLSRFPITARTAIKGRFE---GS 224
Db 2973 AVALARRAGAEVLATAGPAKHGTILRALGLDDEHIA-----SSRETGPARKFRRTGG 3025
QY 225 RFUPYHTRNINOINGALDGKAPILGYAEDPVLEPFMHIOGSGRLKTPSGKYIRIYAKNE 284
Db 3026 RGVDV-VLNSLTGELLDESADLL-AED-----GVFVEMGKTDLRD 3063
QY 285 HPVVISIGRYMADKGYLKGOTSMQGIKSYMRQNPORLAEVLGQNSYIFFRRELAGSSNDG 344
Db 3064 -----AGDFRGYVAPFDLGEA-----GDRLGEIL-----REV----- 3091
QY 345 PVGALGTPLMGEYAGAVDRHYIT--LG-APLFVATAHPVTRKALNRLINAQDTGSAIDG 400
Db 3092 -VGLLG-----AGELDRLPVSAWELGSAP--AALQHMRSGRHVGLKVLTPAPVDPDG 3141
QY 401 AVR V 404
Db 3142 TVLI 3145

RESULT 13

US-08-439-009A-4
; Sequence 4, Application US/08439009A
; Patent No. 6004787
; GENERAL INFORMATION:
; APPLICANT: Donadio, S
; APPLICANT: Katz, L
; APPLICANT: Mcalpine, J B
; TITLE OF INVENTION: Method of Directing Biosynthesis of
; TITLE OF INVENTION: Specific Polyketides
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Steven F. Weinstein
; STREET: Abbott Laboratories D377/AP6D-2 One Abbott
; CITY: Park Rd
; CITY: Abbott Park
; STATE: IL
; COUNTRY: US
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/439,009A
; FILING DATE: 11-MAY-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Casuto, Dianne
; REGISTRATION NUMBER: 40,943
; REFERENCE/DOCKET NUMBER: 4952.US.D1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 847-938-3137
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3567 amino acids
; TYPE: amino acid
; TOPOLOGY: linear

MOLECULE TYPE: protein
US-08-439-009A-4

Query Match 4.2%; Score 98; DB 2; Length 3567;
Best Local Similarity 21.9%; Pred. No. 5.7;
Matches 106; Conservative 50; Mismatches 144; Indels 184; Gaps 29;

QY 8 AALYGIATAAIAACQSKSIQTTPDPTSVING-----PDRP-----VGIPD----- 48
DB 2759 AAMWG-----VIRCAQAESPDREVLDDTDAEPGMLPAVPDNPQALRGDDVFPRLSPLAP 2814
QY 49 -----PAGT--TVGGGGAVYTV-----VPHLSLPHNAQ-----DFAKSLQSR-----LQCA 89
DB 2815 SALTIPAGTORLVPDGGDAIDSVAEPADPVEQPLRAGEVRVDVRATGVNFRDVLALGMY 2874
QY 90 NLKNRQGMQDV--CAQAFQTPVHSHFOAKOFFERYFTFPWQVAGNGSLAGTGTGYEVPVLKGD 148
DB 2875 PQKADMTEAGVVTAVGPDVDAF-----APGDRVLGLFQGAFAPIAVTD 2919
QY 149 DRRTAQARPPYIGIPD-----DFISVPLP-----AGLRSGK----- 179
DB 2920 HELLAR-----VPDGSWSDADAAAVPIAYTTAHVALHDLAQLRAGQSVLIHAAAGVGM 2972
QY 180 -ALVRIQTG-----KNSGTIDNTG--GTHTADLSRFPITARTTAIKGRFE---GS 224
DB 2973 AVALARAGAEVLATAGPAKHGTURLALGLDDEHIA-----SSRETGFARKFRERTGG 3025
QY 225 RFLPYHTNRQINGGALDGKAPILGYAEDPVELFFMHIOGSGRLKTPSGKYIRIGYADKNE 284
DB 3026 RGVDV-VLNSLTGELLDESADLL--AED-----GVFVEMGKTDLRD 3063
QY 285 HPYISGRYMAADKGYLKLQGTSMQGIKSYMQRONPORLAFLVQNPSTYIFFRELAGSSNDG 344
DB 3064 -----AGDFRGRYAPFDLGEA-----GDDRLEIL-----REV----- 3091
QY 345 PVGALGTPLMGEYAGAVDRHYIT---LG-APLFAVATAHPVTRKALNRLIQAOTGSAIDG 400
DB 3092 -VGLLG-----AGELDRLPVSAWELGSAP--AALQHMRSRGRHVGLVLTQAPVDPDG 3141
QY 401 AVRVR 404
DB 3142 TVLI 3145

RESULT 14
US-09-252-991A-30850
; Sequence 30850, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 30850
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-30850

Query Match 4.2%; Score 97.5; DB 2; Length 457;
Best Local Similarity 19.7%; Pred. No. 0.27;
Matches 69; Conservative 50; Mismatches 141; Indels 91; Gaps 13;
QY 124 PHQVAGNSLACTVTGYEVPVLKGDRTTAQARFPFIYIPDDFISVPLPAGLRSGKALVR 183
DB 153 PDPVDEGLHAGLDHRHRTAARLADRHHAHPGTTLRALHARGALPHELGGRAATR---- 208

QY 184 IRQTGKNSGTIDNTGTHTADLSRFPITARTTAIKG---RFEGRSRLPYHTNRQINGGAL 240
DB 209 -RPAGTEAAMIEISGVHKA-YGQPEV-----VKGVDLRVDKGEVL-----SIIGSG 254
QY 241 DGKAPILGYAE--DPVELFFMHIOG-----SGRLKTPSGKYIRIGYADKNEHPYVS 289
DB 255 SGKSTLLMCINGLEPIQRGSRVVDGIDVHARGTDLNRLR---RKIGIVFQOMNAPPHLT 310
QY 290 I-----GRYMAADKGYLKLQGTSMQGIKSYMQRONPORL-----AEVLQ 327
DB 311 VLENVMLAPRKVLGKSRABEAEMALKQLTHVGLGDKLVKFFPRLSGGQOQRMALARALAM 370
QY 328 NPSYIFFRELAGSSNDGPVGLGTPLMGEYAGAVDRHYITLGAFLFVATAHPVTRKALNR 387
DB 371 SPEYMLF-----DEATSAIDPQLVGE-----VVDTRMLAEBSGMTM 406
QY 388 LIMADQTSATDGAVRVDYFWGYGDEAGELAGKQKTTGYVMOLLNMGKPE 438
DB 407 VLVTHIRFARDVSDRVAFERN-----GLVHEIGTPDQVIGNPORPE 448
RESULT 15
US-09-252-991A-32439
; Sequence 32439, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 32439
; LENGTH: 1118
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-32439

Query Match 4.1%; Score 96.5; DB 2; Length 1118;
Best Local Similarity 23.2%; Pred. No. 1.4;
Matches 76; Conservative 45; Mismatches 138; Indels 69; Gaps 18;
QY 76 DPAKS---LQSFRLGCANLKNRQGMQDVCAQAFQT-----PVHSFOAKOFFERY--- 121
DB 314 DFPASRLSRSVRAALLSLAMAAGAAPLCASAAEAHARPIAPAGQLGVDLNRFARE 373
QY 122 -----FTPMQVAGNGS--LAGTVTGYEVPVLKGDRTTAQARFPFIYIPD-DFISVPLP 172
DB 374 AGITLSATPAQTGYSSQGLRGSFT-----VOOGLARLLADTPLEAEDGDSFVLREAP 428
QY 173 AGLRSKAL-----VRIQTGKNSGTIDNTGTHTADLSRFPITARTTAIKRFGESRFLP 228
DB 429 A--KDGVDLNMQAVEVFALGNLNGSTDGYLATHS-----QIATKTS--KPLETSQTVS 478
QY 229 YHTRNQINGGALDGKAPILGYAEDPVELFFMHIOGSGRLKTPSGKYIRI-GYADKN-EHP 286
DB 479 VITREQIDDTASKTVQOMRYTPG---IFTQGVGASNRY-----DYVMRGRFADNSVDNI 530
QY 287 VYSIGRYMADKGYLKLQGTSMQGIKSYMQRONPORLAFLVQNPSTYIFFR 335
DB 531 YLDGLKAMGDSGTFFSSMQVDPPYFLERIDVLKGPSSVILGRLGGLVALTSKKPLYEDYR 590
QY 336 ELAGSSNDGPVGLGTPLMG-EYAGAVD 362
DB 591 QITGS-----IGNMGQKEMGDFDSGPLD 613

RESULT 16

US-08-487-183A-12
; Sequence 12, Application US/08487183A
; Patent No. 6387675
; GENERAL INFORMATION:
; APPLICANT: WOOD, Keith V.
; APPLICANT: GRUBER, Monika G.
; TITLE OF INVENTION: MUTANT LUCIFERASES
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: P.O. Box 1497
; CITY: Madison
; STATE: WI
; COUNTRY: USA
; ZIP: 53701-1497
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/487.183A
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/467,773
; FILING DATE: 06-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/177,081
; FILING DATE: 03-JAN-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Scanlon, William J.
; REGISTRATION NUMBER: 31,136
; REFERENCE/DOCKET NUMBER: 19017/166
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (608)258-5035
; TELEFAX: (608)258-4258
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 548 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-487-183A-12

Query Match 4.1%; Score 95.5; DB 2; Length 548;
Best Local Similarity 20.8%; Pred. No. 0.59;
Matches 96; Conservative 47; Mismatches 148; Indels 171; Gaps 22;
Qy 20 ACQSKSIQTFFQPDTSVINGDRPVGIP-----LSLPHMAAQDFAKSLQSPR-----LGC 88
Db 180 ASSPKTVEVRKEQVALIMNSGSGTGLPKGVOLTHENTVTRFSHARDPIYGNQVSPGTAV 239
Qy 61 YTVVPH-----LGLPHMAAQDFAKSLQSPR-----LGC 88
Db 240 LTVVPFHFGCMFTTLGLYLICGRFVWMLTKDEETFLKLDQYKTSVILVPTLFAILNK 299
Qy 89 ANLKNRQGWQVCAQAF-QTPVHSFQAKQFFERYFTPMQVAGNSLAGTVTGYEYEPVLKG 147
Db 300 SELLNKYDLSNLVETASGAPLSKEVGALARRFNLPGVRQGYGLTETTSAILIITP--EG 357
Qy 148 DDRTAQARFFIYIPDDFISVPLPAGLRSGKALVRIRQTKNSGTIDNTCGTHTADLSR 207
Db 358 DDKFGASGV-----VPL-----FKAVIDLDTKKSLSG----- 385
Qy 208 FPITARTTAIKGRFEGSRFLPYHTRNQINGALDGKAPIL--GYAEDPVELFFMHIOGSG 265
Db 386 -PNRGEVCVKG-----PMLMKGYVNNP-EATKELIDEEG 418
Qy 266 RLKTPSGKYIRIGYADKNEHPYV-----SIGRYMADKGYLKGQTSMQGIKSYNRQNPQR 320
Db 419 WLHTGD-----IGYDEEKHFIVDRLKSILIKY---KGY-----QVPPAE 455

Qy 321 LAEVLGONPSYIRPRELAGSSNDGPVGALGTFLMEYAGAVDRHYITLGAFLFVATAHPV 380
Db 456 LESVLWQHPIS-IF-----DAGVAGVDDPVAGELPGAV-----VWLESKXNM 495
Qy 381 TRKALNRLIMAQ-DTGSALDGAVRVDYFWGYGDGEAGE-LAGK 420
Db 496 TEKEVMDYVASQVSNKRLRGGVR-----FVDEVKPLGTGK 531
RESULT 17
US-09-902-540-15978
; Sequence 15978, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15849)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 15978
; LENGTH: 1803
; TYPE: PRT
; ORGANISM: Myxococcus xanthus
US-09-902-540-15978

Query Match 4.1%; Score 95.5; DB 2; Length 1803;
Best Local Similarity 18.4%; Pred. No. 3.6;
Matches 102; Conservative 68; Mismatches 172; Indels 211; Gaps 25;
Qy 43 PVGIPDPAGTIVGGGAVYTVVPHLSLPHMAAQDFA--KSLQSPRLGCANLKNRQGWQDV 100
Db 435 PVGVPGLYVGGEGLRGYVSRPDLTAERFIPAFATQPGARLYRTG-----DLVRWRPD 489
Qy 101 CAQAF-----QTPVHSFQAKQFFERYFTPMQVAGNSLAGTVTGYEYEPV-----LKG 148
Db 490 GTLEFFIGRIDNQVKVGRFI-----ELADVEAALRTQPGVLEAAAVVREDIPGD 538
Qy 149 DRRTAQA-----RFTYIGIPDDFISVPLP-----AGLRSGKALVR-- 183
Db 539 KRLVAYAMGRDDAPLDVAALRAGMRQRLPEYMWSPSVFVLTPLSTSGKVDKRALPAPD 598
Qy 184 IROTGNKSGTIDNTGGTHTADLSRFPITARTTAIKGRFEGSRFLPYHTR--NQINGGA-- 239
Db 599 SASTGRDGHFVFPSS-----PLAQQLAALWAKELGTERIGLHDHLPDDLGGTSL 648
Qy 240 -----LDGKAPILGYAEDP-VELPFMHIOGSGRL----- 267
Db 649 VVRIAKMRRETLNREVVPVWMLFEHPTVDALAAVLERDAKVDEVPAPAPPEPASEPSAEA 708
Qy 268 --KTPSCKYIRIGYADKNEHPYVIGRYMADKGYLKGQTSMQGIKSYNRQNPORLAEV- 324
Db 709 KHATGSGLVIAVGM-----GRPPGARSVDQFWRNLRDGVESISRTTPQLERLP 758
Qy 325 -----LGNQPSYI-----FFRELASS-NDG 344
Db 759 GLPGLSELSQHPAFVPPAGGVLDGIDGDPGFDLSLREAQWMDPQORLFLQTAWSALEDA 818
Qy 345 PVGALGTP-LMGFAGVADVRHY-----ITL---CAPLF-----VATAHPVTRKALNRL--- 388
Db 819 GIDPERTPEAISLVAGADISGYKDAVRATPLDGAALFELYGTATHESLATKASFKLGLT 878
Qy 389 -----IMADDTGSAIDGAVRVDFYFWGYGDEAGELAGKQKTTG 425
Db 879 GESVLIYTAGSTGLVAVHLACQNLLAGRSVALACATRI-----AVPQRTG 924
Qy 426 YVWQ-----LLPNG 434


```
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: unknown
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM: Luciola lateralis
; US-08-782-118-2

Query Match          4.0%; Score 94.5; DB 1; Length 548;
Best Local Similarity 19.7%; Pred. No. 0.75;
Matches 90; Conservative 56; Mismatches 147; Indels 163; Gaps 24;

Qy 24 KSIQTFPPQDTSVINGPDRPVGIP-----DPA-GTTVGGGAVYTV 64
Db 184 KTVENRKEQVALIMSSGSTGLPKGVQLTHENLVIRFSHARDPIYGNQVSPGTAILTV 243
Qy 65 PH-----LSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAF 105
Db 244 PFHGFQGMFTTGLYLTGCFRIVMLTKFDEETFLKTLQDYK-----CSSVI 288
Qy 106 QTPV--HSFOAQKFFERY--FTPMQVAGNSLAGTVCYYEPVLKGGDRRTAQARFFIYG 161
Db 289 LVPTLFAILNRSELLDKYLSNLVEIASGGA-----PLSKEIGEAVAR-RFNLP 337
Qy 162 IPDDFISVPLPAGLRSGKALVRIRQTGKN-----SGTIDNTGGTHTADLSRFPITARTAI 217
Db 338 VRQGY-----GLTETTSALIIITPEGDDKPGASKGVVPLFKAKVIDLD---TKKTILGP 386
Qy 218 KRGEGSRFLPYHTRNQINGALDGKAPIL--GYAEDPVELFFMHIOQSGRLKTPSGKYI 275
Db 387 NRR-----GEVCVKGPMLMKGYVDNP-EATREIIDBEGWLHTGD---424
Qy 276 RIGYADKNEHPYV-----SIGRYMADKGYLKGTSMOGIKSYMRQNRQRLAEVLGNPS 330
Db 425 -IGYDEBKHFIVDRLSKLIY---KGY-----QVPPAELESVLLQHPN 465
Qy 331 YIFPRELAGSNDGPVGALGTPLMGEYAGVDRHYITLGAPLFVATAPVTRKALNRLIM 390
Db 466 -IF-----DAGVAGVPDPIAGELPGAV-----VLEKKGKSMTEKEVMDYVA 505
Qy 391 AQ-DTGSALDGAVRVDYFWGYGDE-----AGELAGK 420
Db 506 SQVSNAKRLRGVR-----FVDEVKPKGLTGKIDGK 535

RESULT 22
US-09-111-752-14
; Sequence 14, Application US/09111752
; Patent No. 6074859
; GENERAL INFORMATION:
; APPLICANT: HIROKAWA, KOZO
; APPLICANT: KAJIYAMA, NAOKI
; APPLICANT: MURAKAMI, SEIJI
; TITLE OF INVENTION: MUTANT-TYPE BIOLUMINESCENT PROTEIN, AND
; TITLE OF INVENTION: PROCESS FOR PRODUCING MUTANT-TYPE LUMINESCENT PROTEIN
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; ADDRESSEE: P.C.
; STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400
; CITY: ARLINGTON
; STATE: VA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/111,752
; FILING DATE: 08-JUL-1998
; CLASSIFICATION: 435
```

```
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 7126-0009-0
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-413-3000
; TELEFAX: 703-413-2220
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 548 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-111-752-14

Query Match          4.0%; Score 94.5; DB 2; Length 548;
Best Local Similarity 19.7%; Pred. No. 0.75;
Matches 90; Conservative 56; Mismatches 147; Indels 163; Gaps 24;

Qy 24 KSIQTFPPQDTSVINGPDRPVGIP-----DPA-GTTVGGGAVYTV 64
Db 184 KTVENRKEQVALIMSSGSTGLPKGVQLTHENLVIRFSHARDPIYGNQVSPGTAILTV 243
Qy 65 PH-----LSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAF 105
Db 244 PFHGFQGMFTTGLYLTGCFRIVMLTKFDEETFLKTLQDYK-----CSSVI 288
Qy 106 QTPV--HSFOAQKFFERY--FTPMQVAGNSLAGTVCYYEPVLKGGDRRTAQARFFIYG 161
Db 289 LVPTLFAILNRSELLDKYLSNLVEIASGGA-----PLSKEIGEAVAR-RFNLP 337
Qy 162 IPDDFISVPLPAGLRSGKALVRIRQTGKN-----SGTIDNTGGTHTADLSRFPITARTAI 217
Db 338 VRQGY-----GLTETTSALIIITPEGDDKPGASKGVVPLFKAKVIDLD---TKKTILGP 386
Qy 218 KRGEGSRFLPYHTRNQINGALDGKAPIL--GYAEDPVELFFMHIOQSGRLKTPSGKYI 275
Db 387 NRR-----GEVCVKGPMLMKGYVDNP-EATREIIDBEGWLHTGD---424
Qy 276 RIGYADKNEHPYV-----SIGRYMADKGYLKGTSMOGIKSYMRQNRQRLAEVLGNPS 330
Db 425 -IGYDEBKHFIVDRLSKLIY---KGY-----QVPPAELESVLLQHPN 465
Qy 331 YIFPRELAGSNDGPVGALGTPLMGEYAGVDRHYITLGAPLFVATAPVTRKALNRLIM 390
Db 466 -IF-----DAGVAGVPDPIAGELPGAV-----VLEKKGKSMTEKEVMDYVA 505
Qy 391 AQ-DTGSALDGAVRVDYFWGYGDE-----AGELAGK 420
Db 506 SQVSNAKRLRGVR-----FVDEVKPKGLTGKIDGK 535

RESULT 23
US-09-380-061B-16
; Sequence 16, Application US/09380061B
; Patent No. 6265177
; GENERAL INFORMATION:
; APPLICANT: SQUIRRELL, DAVID JAMES
; WHITE, PETER JOHN
; LOWE, CHRISTOPHER ROBIN
; MURRAY, JAMES AUGUSTUS HENRY
; TITLE OF INVENTION: ENZYME ASSAY FOR MUTANT FIREFLY LUCIFERASE
; NUMBER OF SEQUENCES: 21
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: NIXON & VANDERHYE P.C.
; STREET: 1100 NORTH GLEBE ROAD
; CITY: ARLINGTON
; STATE: VIRGINIA
; COUNTRY: U.S.A.
; ZIP: 22201-4714
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
```

```

; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/380,061B
FILING DATE: 25-AUG-1999
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/GB98/01026
FILING DATE: 7-APR-1998
APPLICATION NUMBER: GB 9707468.8
FILING DATE: 11-APR-1997
ATTORNEY/AGENT INFORMATION:
NAME: SADOFF, B. J.
REGISTRATION NUMBER: 36,663
REFERENCE/DOCKET NUMBER: 124-725
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)816-4000
TELEFAX: (703)816-4100
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 548 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 16:
US-09-380-061B-16

Query Match      4.0%; Score 94.5; DB 2; Length 548;
Best Local Similarity 19.7%; Pred. No. 0.75; Indels 163; Gaps 24;
Matches 90; Conservative 56; Mismatches 147;

QY    24 KSIQTPEQPDTSVINGPDRPVGIP-----DPA-GTTVGGGGAVVTW 64
     :|::||::||::||::||::||::||::||::||::||::||::||:
DB    184 KTVEVNKEQVALIMNMSGTGLPKGVQLTHENAVTRFSHARDPIYGNQSPGTAILTV 243
     :|::||::||::||::||::||::||::||::||::||::||::||:
QY    65 PH-----LSLPWAADPAKSLQSFRLCANLKNRGQMDVCAQAF 105
     :|::||::||::||::||::||::||::||::||::||::||::||:
DB    244 PFHHGFGMFTTLGYLTGCFRIVMLTKFDEETFLKTLDYK-----CSSVI 288
     :|::||::||::||::||::||::||::||::||::||::||::||:
QY    106 QTPV--HSFOAKQFFERY--FTPQVAGNSLAGTVTGYYEPVLKDDRRTAQAARFIYG 161
     :|::||::||::||::||::||::||::||::||::||::||::||:
DB    289 LVPTLFALNRSELLDYDLNLVEIASGGA-----PLSKEIGEAVAR-RFNLPG 337
     :|::||::||::||::||::||::||::||::||::||::||::||:
QY    162 IPDDFISVPLPAGLRSGKALVRIRQTCKN---SGTIDNTGGTHTDLSRPPIARTAI 217
     :|::||::||::||::||::||::||::||::||::||::||::||:
DB    338 VRQY-----GUTETSAILIITPEGDKPGASKGVVPFKAKVIDLD----TKTLGP 386
     :|::||::||::||::||::||::||::||::||::||::||::||:
QY    218 KGRFEGRFLPYHTRNOINGGALDGKAPIL--GYAEDPFVELFMHIQSGSELKTPSGKYI 275
     :|::||::||::||::||::||::||::||::||::||::||::||:
DB    387 NRR-----GEVCVKGPLMKGVVDNP-EATREIIDEGWLHTGD----424
     :|::||::||::||::||::||::||::||::||::||::||::||:
QY    276 RIgyADkNEHPYV-----SIGRYMADKGYLKLGTSMQGIKSXYRNQPNQLAEVLQNPS 330
     |||::||::||::||::||::||::||::||::||::||::||::||:
DB    425 -IGYDDEKHFFIVDLRLKSLIKY---KGY-----QVPPAALESVLLQHPN 465
     :|::||::||::||::||::||::||::||::||::||::||::||:
QY    331 YIFRELAGSSNDGPFVAGLGTPLMGCEVAGADRHYITLGAPLVATAHPVTRKANRLIM 390
     |||::||::||::||::||::||::||::||::||::||::||::||:
DB    466 -IF-----DAGVAGVDPDIAGELFGAV-----VVLEKGSMTKEKVMDYVA 505
     :|::||::||::||::||::||::||::||::||::||::||::||:
QY    391 AQ-DTGSaIDgAvDVdYfWGyGDe-----AGELAGK 420
     :|::||::||::||::||::||::||::||::||::||::||::||:
DB    506 SQVSNAKRLRGVR-----FVDEVPKGLTGKIDGK 535
     :|::||::||::||::||::||::||::||::||::||::||::||:

RESULT 24
US-08-487-183A-14
; Sequence 14, Application US/08487183A
; Patent No. 6387675
; GENERAL INFORMATION:
; APPLICANT: WOOD, Keith V.
; APPLICANT: GRUBER, Monika G.
; TITLE OF INVENTION: MUTANT LUCIFERASES
```

```

; TITLE OF INVENTION: SAME
; FILE REFERENCE: 193582US-3524-7126-0 PCT
; CURRENT APPLICATION NUMBER: US/09/581,241A
; CURRENT FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: JP97/361022
; PRIOR FILING DATE: 1997-12-26
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 4
; LENGTH: 548
; TYPE: PRT
; ORGANISM: Luciola lateralis
US-09-581-241A-4

Query Match      4.0%; Score 94.5; DB 2; Length 548;
Best Local Similarity 19.7%; Pred. No. 0.75;
Matches 90; Conservative 56; Mismatches 147; Indels 163; Gaps 24;

Qy 24 KSIQTFQPDTSVINGDPDPVGP-----LSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAF 64
Db 184 KTVENRKEQVALIMNSSGSTGLPKGVQLTHENAVTRFSHARDPIYGNQVSPGTAITTV 243
Qy 65 PH-----LSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAF 105
Db 244 PFHGFQMTTLGYLTCGFRIVMLTKFDEETFLKTLQDYK-----CSSVI 288
Qy 106 QTPV--HSFOAKOFFERY--FTPMQVAGNSLAGVTGTYGYPEVLKGDGDRRTAQAARFPIYG 161
Db 289 LVPTLFAILNRSELLDKYDLSNLVEIASGGA-----PLSKEIGEAVAR-RFNLP 337
Qy 162 IPDDFISVPLPAGLRSGKALVRIRQTGKN-----SGTIDNTGGTHTADLSRPIITARTAI 217
Db 338 VRQGY-----GLTETTSAILIITPEGDDKPGASGVVPLFKAKVIDLD-----TKKTLGP 386
Qy 218 KRGREGSRFLPYHTRNQINGALDGKAPIL--GYAEDPVELFFMHIOGSGRLKTPSGKYI 275
Db 387 NRR-----GEVCVKGPMMLKMGYVNDP-EATREIIDEGWLHTGD-----424
Qy 276 RIGYADKNEHPYV-----SIGRYMADKGYLKGOTSMOGIKSYMRQNPORLAEVLGNPS 330
Db 425 -IGYDEBKHFIVDRLSKLIKY--KGY-----QVPPAELESVLLQHPN 465
Qy 331 YIFPRELAGSNDGPGVAGLTGFLMGEGYAGVDRHYITLGAFLFVATAPVTRKALNRILM 390
Db 466 -IF-----DAGVAGVPDPIAGELPGAV-----VLEKKGKSMTEKEVMDYVA 505
Qy 391 AQ-DTGSALDGAVRVDYFWGVDGDE-----AGELAGK 420
Db 506 SQVSNAKRLRGVVR-----FVDEVPKLGTGKIDGK 535

RESULT 26
US-09-581-241A-4
; Sequence 4, Application US/09581241A
; Patent No. 6812012
; GENERAL INFORMATION:
; APPLICANT: HATTORI, NORIAKI
; APPLICANT: MURAKAMI, SEIJI
; TITLE OF INVENTION: LUCIFERASE AND A METHOD FOR DETECTING INTRACELLULAR ATP USING THE
; FILE REFERENCE: 193582US-3524-7126-0 PCT
; CURRENT APPLICATION NUMBER: US/09/581,241A
; CURRENT FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: JP97/361022
; PRIOR FILING DATE: 1997-12-26
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 6
; LENGTH: 548
; TYPE: PRT
; ORGANISM: Luciola lateralis
US-09-581-241A-4

Query Match      4.0%; Score 94.5; DB 2; Length 548;
Best Local Similarity 19.7%; Pred. No. 0.75;
Matches 90; Conservative 56; Mismatches 147; Indels 163; Gaps 24;

Qy 24 KSIQTFQPDTSVINGDPDPVGP-----LSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAF 64
Db 184 KTVENRKEQVALIMNSSGSTGLPKGVQLTHENAVTRFSHARDPIYGNQVSPGTAITTV 243
Qy 65 PH-----LSLPHWAAQDFAKSLQSFRLGCANLKNRQGWQDVCAQAF 105
Db 244 PFHGFQMTTLGYLTCGFRIVMLTKFDEETFLKTLQDYK-----CSSVI 288
Qy 106 QTPV--HSFOAKOFFERY--FTPMQVAGNSLAGVTGTYGYPEVLKGDGDRRTAQAARFPIYG 161
Db 289 LVPTLFAILNRSELLDKYDLSNLVEIASGGA-----PLSKEIGEAVAR-RFNLP 337
Qy 162 IPDDFISVPLPAGLRSGKALVRIRQTGKN-----SGTIDNTGGTHTADLSRPIITARTAI 217
Db 338 VRQGY-----GLTETTSAILIITPEGDDKPGASGVVPLFKAKVIDLD-----TKKTLGP 386
Qy 218 KRGREGSRFLPYHTRNQINGALDGKAPIL--GYAEDPVELFFMHIOGSGRLKTPSGKYI 275
Db 387 NRR-----GEVCVKGPMMLKMGYVNDP-EATREIIDEGWLHTGD-----424
Qy 276 RIGYADKNEHPYV-----SIGRYMADKGYLKGOTSMOGIKSYMRQNPORLAEVLGNPS 330
Db 425 -IGYDEBKHFIVDRLSKLIKY--KGY-----QVPPAELESVLLQHPN 465
Qy 331 YIFPRELAGSNDGPGVAGLTGFLMGEGYAGVDRHYITLGAFLFVATAPVTRKALNRILM 390
Db 466 -IF-----DAGVAGVPDPIAGELPGAV-----VLEKKGKSMTEKEVMDYVA 505
Qy 391 AQ-DTGSALDGAVRVDYFWGVDGDE-----AGELAGK 420
Db 506 SQVSNAKRLRGVVR-----FVDEVPKLGTGKIDGK 535

RESULT 27
US-09-581-241A-6
; Sequence 6, Application US/09581241A
; Patent No. 6812012
; GENERAL INFORMATION:
; APPLICANT: HATTORI, NORIAKI
; APPLICANT: MURAKAMI, SEIJI
; TITLE OF INVENTION: LUCIFERASE AND A METHOD FOR DETECTING INTRACELLULAR ATP USING THE
; FILE REFERENCE: 193582US-3524-7126-0 PCT
; CURRENT APPLICATION NUMBER: US/09/581,241A
; CURRENT FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: JP97/361022
; PRIOR FILING DATE: 1997-12-26
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 6
; LENGTH: 548
; TYPE: PRT
; ORGANISM: Luciola lateralis
US-09-581-241A-6
```

```

289 LVPTFLAIRNRSELLDKYDLSNLVEIASGGA-----PLSKETGEAVAR-RFNLP 333
162 IPDDFISVPLPAGLRSGKALVRIRQTGKN-----SGTIDNTGGTHTADLSRPFITARTTAI 217
338 VRQGY-----GLTETTSAILIITPEGDDKPGAGSKVPLFKAKVIDLD---TKKTLP 386
218 KGRPEGSRFTPYHTRNQINGALDGKAPIL--GYAEDPVELFFPHIQSGRLKTPSGKYI 275
387 NRR-----GEVCVKGEMLMKGYVDNP-EATREIIDEGMLHTGD--- 424
276 RIGYADKNEHPV-----SIGRYMADGKYLKLGQTSQGIKSYMRONFORLAELVGLQNP 330
425 -IGYDEKKEFFIVDRLKSLIKY--KGY-----QVPPAELESVLLQHPN 465
331 YIFFRELAGSNSDGPVGALGTPLMGEYAGAVDRHYITLGAPLFVATAHPVTRKALNRLIM 390
466 -IF-----DAGVAGVDPPIAGELPGAV-----VLEKKGKSMTEKEYMDYVA 505
391 AQ-DTSAIDGAVRVDFWGYGDE-----AGELAGK 420
506 SOVSNAKRLGGVR-----FVDEVPRKGLTGKIDGK 535

RESULT 29
US-08-460-934-6
; Sequence 6, Application US/08460934
; Patent No. 5814465
; GENERAL INFORMATION:
; APPLICANT: TATSUMI, HIROKI
; APPLICANT: FUKUDA, SATOSHI
; APPLICANT: KIKUCHI, MAMORU
; APPLICANT: KOYAMA, YASUJI
; TITLE OF INVENTION: BIOTINYLATED FIREFLY LUCIFERASE, A GENE
; TITLE OF INVENTION: FOR BIOTINYLATED FIREFLY LUCIFERASE, A RECOMBINANT DNA
; TITLE OF INVENTION: PROCESS FOR PRODUCING BIOTINATED AND A BIOLUMINESCENT
; TITLE OF INVENTION: ANALYSIS METHOD
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; ADDRESSEE: P.C.
; STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/460,934
; FILING DATE: 05-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 193798/1994
; FILING DATE: 27-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 54625/1995
; FILING DATE: 14-MAR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 98857/1995
; FILING DATE: 24-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 7126-001-0
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-413-3000
; TELEFAX: 703-413-2220
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 568 amino acids

```

```
;
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-460-934-6

Query Match
Best Local Similarity 4.0%; Score 94.5; DB 1; Length 568;
Matches 90; Conservative 56; Mismatches 147; Indels 163; Gaps 24;

Qy 24 KSIQTFPQDTSVINGDPDPVGP-----DPA-GTTVGGGGAVYTV 64
Db 204 KTVENRKEQVALIMNSGSLGPKGVQLTHENLVTRFSHARDPIYGNQVSPGTAITV 263
Qy 65 PH-----LSLPHWAAQDPKSLQSFRLGCANLKNRQGWQDVCAQAF 105
Db 264 PFHHGFGMTTLGLVLTGCFRIVMLTKFDEETFLKTLQDYK-----CSSVI 308
Qy 106 QTPV--HSFOAKOFFERY--FTPMQVAGNSLAGVTGYBPVLKGDRTTAQAREPIYG 161
Db 309 LVPTLFAILNRSELLDKYDLSNLVEIASGGA-----PLSKEIGEAVAR-RFNLP 357
Qy 162 IPDDFISVPLPAGLRSGKALVRIQTGKN-----SGTIDNTGTHTADLSRFPITARTAI 217
Db 358 VRQY-----GLTETTSALIIITPEGDDKPGASGVVPLFKAKVIDLD---TKKTLGP 406
Qy 218 KRGFEGRFLPYHTRNQINGALDGKAPIL--GYAEDPVELFFMHIOGSGRLKTPSGKYI 275
Db 407 NRR-----GEVCVKGPMLMKGYVDNP-EATREIIDEGWLHTGD---CSSVI 444
Qy 276 RIGYADKNEHPYV-----SIGRYMADKGYLKGQTSMOGKSYMRQNPORLAELVGNPS 330
Db 445 -IGYDEKHFVIVDRLSLIKY---KGY-----QVPPAELESVLLQHPN 485
Qy 331 YIFFRELAGSNDGVPVAGLGTPLMGEYAGVDRHYITLGAPLVATAHPVTRKALNRLIM 390
Db 486 -IF-----DAGVAGVPDPIAGELPGAV-----VLEKGSMTKEVMDYVA 525
Qy 391 AQ-DTGSAGIDGAVRDYFWGYGDE-----AGELAGK 420
Db 526 SQVSNAKRLRGVR-----FVDEVKGLTKIDGK 555

RESULT 30
US-08-782-118-6
; Sequence 6, Application US/08782118
; Patent No. 5843746
; GENERAL INFORMATION:
; APPLICANT: TATSUMI, HIROKI
; APPLICANT: FUKUDA, SATOSHI
; APPLICANT: KIKUCHI, MAMORU
; APPLICANT: KOYAMA, YASUJI
; TITLE OF INVENTION: BIOTINYLATED FIREFLY LUCIFERASE, A GENE
; TITLE OF INVENTION: FOR BIOTINYLATED FIREFLY LUCIFERASE, A RECOMBINANT DNA, A
; TITLE OF INVENTION: PROCESS FOR PRODUCING BIOTINATED AND A BIOLUMINESCENT
; TITLE OF INVENTION: ANALYSIS METHOD
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; ADDRESSEE: P.C.
; STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, FOURTH FLOOR
; CITY: ARLINGTON
; STATE: VA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/782,118
; FILING DATE: 13-JAN-1997
; CLASSIFICATION: 435
```

```
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/460,934
; FILING DATE: 05-JUN-1995
; APPLICATION NUMBER: JP 193798/1994
; FILING DATE: 27-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 54625/1995
; FILING DATE: 14-MAR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 98857/1995
; FILING DATE: 24-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 7126-001-0
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-413-3000
; TELEFAX: 703-413-2220
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 568 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-782-118-6

Query Match
Best Local Similarity 4.0%; Score 94.5; DB 1; Length 568;
Matches 90; Conservative 56; Mismatches 147; Indels 163; Gaps 24;

Qy 24 KSIQTFPQDTSVINGDPDPVGP-----DPA-GTTVGGGGAVYTV 64
Db 204 KTVENRKEQVALIMNSGSLGPKGVQLTHENLVTRFSHARDPIYGNQVSPGTAITV 263
Qy 65 PH-----LSLPHWAAQDPKSLQSFRLGCANLKNRQGWQDVCAQAF 105
Db 264 PFHHGFGMTTLGLVLTGCFRIVMLTKFDEETFLKTLQDYK-----CSSVI 308
Qy 106 QTPV--HSFOAKOFFERY--FTPMQVAGNSLAGVTGYBPVLKGDRTTAQAREPIYG 161
Db 309 LVPTLFAILNRSELLDKYDLSNLVEIASGGA-----PLSKEIGEAVAR-RFNLP 357
Qy 162 IPDDFISVPLPAGLRSGKALVRIQTGKN-----SGTIDNTGTHTADLSRFPITARTAI 217
Db 358 VRQY-----GLTETTSALIIITPEGDDKPGASGVVPLFKAKVIDLD---TKKTLGP 406
Qy 218 KRGFEGRFLPYHTRNQINGALDGKAPIL--GYAEDPVELFFMHIOGSGRLKTPSGKYI 275
Db 407 NRR-----GEVCVKGPMLMKGYVDNP-EATREIIDEGWLHTGD---CSSVI 444
Qy 276 RIGYADKNEHPYV-----SIGRYMADKGYLKGQTSMOGKSYMRQNPORLAELVGNPS 330
Db 445 -IGYDEKHFVIVDRLSLIKY---KGY-----QVPPAELESVLLQHPN 485
Qy 331 YIFFRELAGSNDGVPVAGLGTPLMGEYAGVDRHYITLGAPLVATAHPVTRKALNRLIM 390
Db 486 -IF-----DAGVAGVPDPIAGELPGAV-----VLEKGSMTKEVMDYVA 525
Qy 391 AQ-DTGSAGIDGAVRDYFWGYGDE-----AGELAGK 420
Db 526 SQVSNAKRLRGVR-----FVDEVKGLTKIDGK 555

Search completed: December 30, 2005, 08:25:50
Job time : 30 secs
```

THIS PAGE BLANK (USPTO)

THIS PAGE BLANK (USPTO)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: December 30, 2005, 16:27:04 ; Search time 96 Seconds
(without alignments)
370.325 Million cell updates/sec

Title: US-09-914-454B-1

Perfect score: 20

Sequence: 1 tccatgacgttctcgacgtt 20

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA:*

- 1: /cgn2_6/ptodata/1/ina/1 COMB.seq:*
- 2: /cgn2_6/ptodata/1/ina/5 COMB.seq:*
- 3: /cgn2_6/ptodata/1/ina/6A COMB.seq:*
- 4: /cgn2_6/ptodata/1/ina/6B COMB.seq:*
- 5: /cgn2_6/ptodata/1/ina/H COMB.seq:*
- 6: /cgn2_6/ptodata/1/ina/PCRTUS COMB.seq:*
- 7: /cgn2_6/ptodata/1/ina/PP COMB.seq:*
- 8: /cgn2_6/ptodata/1/ina/RE COMB.seq:*
- 9: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	20	100.0	20	2	US-09-133-774-12
2	20	100.0	20	3	US-09-303-862-12
3	20	100.0	20	3	US-08-738-652-10
4	20	100.0	20	3	US-09-030-701-62
5	20	100.0	20	3	US-09-286-098-100
6	20	100.0	20	3	US-09-286-098-105
7	20	100.0	20	3	US-08-960-774-10
8	20	100.0	20	3	US-09-082-649B-51
9	20	100.0	20	3	US-09-082-649B-56
10	20	100.0	20	3	US-09-082-649B-58
11	20	100.0	20	3	US-09-325-193A-86
12	20	100.0	20	3	US-09-325-193A-90
13	20	100.0	20	3	US-09-191-170-97
14	20	100.0	20	3	US-09-690-921-1
15	20	100.0	20	3	US-09-301-829A-1
16	20	100.0	20	3	US-09-692-170C-42
17	20	100.0	20	3	US-09-337-619-10
18	20	100.0	20	3	US-10-405-231A-42
19	20	100.0	20	3	US-10-238-607-42
20	20	100.0	20	3	US-09-984-365-42
21	20	100.0	20	3	US-09-565-906-1
22	20	100.0	20	3	US-09-257-188A-2
23	20	100.0	20	3	US-09-965-101-51
24	20	100.0	20	3	US-09-965-101-56

25	20	100.0	20	3	US-09-965-101-58	Sequence 58, Appl
26	20	100.0	20	3	US-10-697-055-42	Sequence 42, Appl
27	20	100.0	20	3	US-10-651-013-14	Sequence 14, Appl
28	20	100.0	20	3	US-09-917-222B-1	Sequence 1, Appl
29	20	100.0	20	3	US-09-954-987B-83	Sequence 83, Appl
30	20	100.0	20	3	US-09-672-126B-83	Sequence 83, Appl
31	20	100.0	44	3	US-09-082-649B-12	Sequence 12, Appl
32	20	100.0	44	3	US-09-082-649B-13	Sequence 13, Appl
33	20	100.0	44	3	US-09-965-101-12	Sequence 12, Appl
34	20	100.0	44	3	US-09-965-101-13	Sequence 13, Appl
35	18.4	92.0	20	3	US-09-954-987B-131	Sequence 131, Appl
36	17	85.0	17	3	US-09-030-701-39	Sequence 39, Appl
37	17	85.0	17	3	US-09-286-098-70	Sequence 70, Appl
38	17	85.0	17	3	US-08-960-774-70	Sequence 70, Appl
39	17	85.0	17	3	US-09-325-193A-60	Sequence 60, Appl
40	17	85.0	17	3	US-09-191-170-64	Sequence 64, Appl
41	17	85.0	17	3	US-09-337-619-70	Sequence 70, Appl
42	17	85.0	17	3	US-09-954-987B-34	Sequence 34, Appl
43	17	85.0	17	3	US-09-672-126B-50	Sequence 50, Appl
44	16.8	84.0	20	2	US-09-133-774-11	Sequence 11, Appl
45	16.8	84.0	20	3	US-08-386-063-25	Sequence 25, Appl

ALIGNMENTS

RESULT 1

US-09-133-774-12

; Sequence 12, Application US/09133774B

; Patent No. 5962636

; GENERAL INFORMATION:

; APPLICANT: Bachmaier, Kurt

; APPLICANT: Hessel, Andrew J.

; APPLICANT: Neu M.D., Nikolaus

; APPLICANT: Penninger, Josef M.

; TITLE OF INVENTION: No. 5962636el Peptides Capable of Modulating Inflammatory Heart

; FILE REFERENCE: A-536

; CURRENT APPLICATION NUMBER: US/09/133,774B

; CURRENT FILING DATE: 1998-08-12

; NUMBER OF SEQ ID NOS: 26

; SOFTWARE: Patentin Ver. 2.0

; SEQ ID NO 12

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Chlamydia trachomatis

; FEATURE:

; OTHER INFORMATION: An oligonucleotide derived from the DNA encoding a

; OTHER INFORMATION: 60 kDa cysteine rich outer membrane protein from

; OTHER INFORMATION: Chlamydia trachomatis.

US-09-133-774-12

Query Match 100.0%; Score 20; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCGACGTT 20

|||||

Db 1 TCCATGACGTTCTCGACGTT 20

RESULT 2

US-09-303-862-12

; Sequence 12, Application US/09303862

; Patent No. 6034230

; GENERAL INFORMATION:

; APPLICANT: Bachmaier, Kurt

; APPLICANT: Hessel, Andrew J.

; APPLICANT: Neu M.D., Nikolaus

; APPLICANT: Penninger, Josef M.

; TITLE OF INVENTION: No. 6034230el Peptides Capable of Modulating Inflammatory Heart

; FILE REFERENCE: A-536

Tue Jan 3 10:58:22 2006

; CURRENT APPLICATION NUMBER: US/09/303,862
; CURRENT FILING DATE: 1999-05-03
; EARLIER APPLICATION NUMBER: 09/133,774
; EARLIER FILING DATE: 1998-08-12
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Chlamydia trachomatis
; FEATURE:
; OTHER INFORMATION: An oligonucleotide derived from the DNA encoding a
; OTHER INFORMATION: 60 kDa cysteine rich outer membrane protein from
; OTHER INFORMATION: Chlamydia trachomatis.
US-09-303-862-12

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
| | | | | | | | | | | | | | | | | | | | | |
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 3

US-08-738-652-10
; Sequence 10, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7004 HCL
; CURRENT APPLICATION NUMBER: US/08/738,652B
; CURRENT FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-10

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
| | | | | | | | | | | | | | | | | | | | | |
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 4

US-09-030-701-62
; Sequence 62, Application US/09030701B
; Patent No. 6214806
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schwartz, David A.
; TITLE OF INVENTION: USE OF NUCLEIC ACIDS CONTAINING
; TITLE OF INVENTION: UNMETHYLATED CPG DINUCLEOTIDE IN THE TREATMENT OF
; TITLE OF INVENTION: LPS-ASSOCIATED DISORDERS
; FILE REFERENCE: C1039/7011
; CURRENT APPLICATION NUMBER: US/09/030,701B
; CURRENT FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: 60/039,405
; PRIOR FILING DATE: 1997-02-28

; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 62
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-030-701-62

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
| | | | | | | | | | | | | | | | | | | | | |
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 5

US-09-286-098-100
; Sequence 100, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 100
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-286-098-100

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
| | | | | | | | | | | | | | | | | | | | | |
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 6

US-09-286-098-105
; Sequence 105, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 105
; LENGTH: 20
; TYPE: DNA

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-286-098-105

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
|||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 7

US-08-960-774-10
; Sequence 10, Application US/08960774
; Patent No. 6239116
; GENERAL INFORMATION:
; APPLICANT: Krieg et al.,
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
; NUMBER OF SEQUENCES: 111
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/960,774
; FILING DATE: 30-October-1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: U.S. Serial No. 6239116 08/738,652
; FILING DATE: October 30, 1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Haile, Lisa A.
; REGISTRATION NUMBER: 38,347
; REFERENCE/DOCKET NUMBER: 08918/012001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619/678-5070
; TELEFAX: 619/678-5099
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-960-774-10

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
|||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 8

US-09-082-649B-51
; Sequence 51, Application US/09082649B
; Patent No. 6339068
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.

; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schorr, Joachim
; APPLICANT: Wu, Tong
; TITLE OF INVENTION: Vectors and Methods for Immunization or
; FILE REFERENCE: C1039/7009
; CURRENT APPLICATION NUMBER: US/09/082,649B
; CURRENT FILING DATE: 1998-05-20
; PRIOR APPLICATION NUMBER: US 60/047,233
; PRIOR FILING DATE: 1997-05-20
; PRIOR APPLICATION NUMBER: US 60/047,209
; PRIOR FILING DATE: 1997-05-20
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 51
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: Has a phosphorothioate backbone.
US-09-082-649B-51

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
|||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 9

US-09-082-649B-56
; Sequence 56, Application US/09082649B
; Patent No. 6339068
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schorr, Joachim
; APPLICANT: Wu, Tong
; TITLE OF INVENTION: Vectors and Methods for Immunization or
; FILE REFERENCE: C1039/7009
; CURRENT APPLICATION NUMBER: US/09/082,649B
; CURRENT FILING DATE: 1998-05-20
; PRIOR APPLICATION NUMBER: US 60/047,233
; PRIOR FILING DATE: 1997-05-20
; PRIOR APPLICATION NUMBER: US 60/047,209
; PRIOR FILING DATE: 1997-05-20
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 56
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: Has phosphodiester backbone.
US-09-082-649B-56

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
|||||
Db 1 TCCATGACGTTCTCTGACGTT 20

Tue Jan 3 10:58:22 2006

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
 Db 1 TCCATGACGTTCTCTGACGTT 20
 RESULT 12
 US-09-325-193A-90
 ; Sequence 90, Application US/09325193A
 ; Patent No. 6406705
 ; GENERAL INFORMATION:
 ; APPLICANT: Davis, Heather L.
 ; APPLICANT: Schorr, Joachim
 ; APPLICANT: Krieg, Arthur M.
 ; TITLE OF INVENTION: Use of Nucleic Acids Containing
 ; TITLE OF INVENTION: Unmethylated CpG Dinucleotide as an Adjuvant
 ; FILE REFERENCE: C1039/7025/HCL
 ; CURRENT APPLICATION NUMBER: US/09/325,193A
 ; CURRENT FILING DATE: 1999-06-03
 ; PRIOR APPLICATION NUMBER: US 09/154,614
 ; PRIOR FILING DATE: 1998-09-16
 ; PRIOR APPLICATION NUMBER: PCT/US98/04703
 ; PRIOR FILING DATE: 1998-03-10
 ; PRIOR APPLICATION NUMBER: US 60/040,376
 ; PRIOR FILING DATE: 1997-03-10
 ; NUMBER OF SEQ ID NOS: 98
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 90
 ; LENGTH: 20
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic Oligonucleotide
 US-09-325-193A-90
 Query Match 100.0%; Score 20; DB 3; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
 Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 13
 US-09-191-170-97
 ; Sequence 97, Application US/09191170
 ; Patent No. 6429199
 ; GENERAL INFORMATION:
 ; APPLICANT: Krieg, Arthur M.
 ; APPLICANT: Hartmann, Gunther
 ; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
 ; TITLE OF INVENTION: for Activating Dendritic Cells
 ; FILE REFERENCE: C1039/7017
 ; CURRENT APPLICATION NUMBER: US/09/191,170
 ; CURRENT FILING DATE: 1998-11-13
 ; EARLIER APPLICATION NUMBER: US 08/960,774
 ; EARLIER FILING DATE: 1997-10-30
 ; EARLIER APPLICATION NUMBER: US 08/738,652
 ; EARLIER FILING DATE: 1996-10-30
 ; EARLIER APPLICATION NUMBER: US 08/386,063
 ; EARLIER FILING DATE: 1995-02-07
 ; EARLIER APPLICATION NUMBER: US 08/276,358
 ; EARLIER FILING DATE: 1994-07-15
 ; NUMBER OF SEQ ID NOS: 99
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 97
 ; LENGTH: 20
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: synthetic oligonucleotide

RESULT 10
 US-09-082-649B-58
 ; Sequence 58, Application US/09082649B
 ; Patent No. 6339088
 ; GENERAL INFORMATION:
 ; APPLICANT: Davis, Heather L.
 ; APPLICANT: Krieg, Arthur M.
 ; APPLICANT: Schorr, Joachim
 ; APPLICANT: Wu, Tong
 ; TITLE OF INVENTION: Vectors and Methods for Immunization or
 ; TITLE OF INVENTION: Therapeutic Protocols
 ; FILE REFERENCE: C1039/7009
 ; CURRENT APPLICATION NUMBER: US/09/082,649B
 ; CURRENT FILING DATE: 1998-05-20
 ; PRIOR APPLICATION NUMBER: US 60/047,233
 ; PRIOR FILING DATE: 1997-05-20
 ; PRIOR APPLICATION NUMBER: US 60/047,209
 ; PRIOR FILING DATE: 1997-05-20
 ; NUMBER OF SEQ ID NOS: 85
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 58
 ; LENGTH: 20
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: synthetic oligonucleotide
 ; NAME/KEY: misc_feature
 ; LOCATION: (0)...(0)
 ; OTHER INFORMATION: Backbone is phosphorothioate--phosphodiester
 ; OTHER INFORMATION: chimera
 US-09-082-649B-58

Query Match 100.0%; Score 20; DB 3; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
 Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 11
 US-09-325-193A-86
 ; Sequence 86, Application US/09325193A
 ; Patent No. 6406705
 ; GENERAL INFORMATION:
 ; APPLICANT: Davis, Heather L.
 ; APPLICANT: Schorr, Joachim
 ; APPLICANT: Krieg, Arthur M.
 ; TITLE OF INVENTION: Use of Nucleic Acids Containing
 ; TITLE OF INVENTION: Unmethylated CpG Dinucleotide as an Adjuvant
 ; FILE REFERENCE: C1039/7025/HCL
 ; CURRENT APPLICATION NUMBER: US/09/325,193A
 ; CURRENT FILING DATE: 1999-06-03
 ; PRIOR APPLICATION NUMBER: US 09/154,614
 ; PRIOR FILING DATE: 1998-09-16
 ; PRIOR APPLICATION NUMBER: PCT/US98/04703
 ; PRIOR FILING DATE: 1998-03-10
 ; PRIOR APPLICATION NUMBER: US 60/040,376
 ; PRIOR FILING DATE: 1997-03-10
 ; NUMBER OF SEQ ID NOS: 98
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 86
 ; LENGTH: 20
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic Oligonucleotide
 US-09-325-193A-86
 Query Match 100.0%; Score 20; DB 3; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1;

US-09-191-170-97

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 14

US-09-690-921-1
; Sequence 1, Application US/09690921
; Patent No. 6544518
; GENERAL INFORMATION:
; APPLICANT: Friede, Martin
; APPLICANT: Gerard, Catherine
; APPLICANT: Hermand, Philippe
; TITLE OF INVENTION: Vaccines
; FILE REFERENCE: B45181-1
; CURRENT APPLICATION NUMBER: US/09/690,921
; CURRENT FILING DATE: 2000-10-18
; PRIOR APPLICATION NUMBER: PCT/EP00/02920
; PRIOR FILING DATE: 2000-04-04
; PRIOR APPLICATION NUMBER: 09/301,829
; PRIOR FILING DATE: 1999-04-29
; PRIOR APPLICATION NUMBER: 9908885.8
; PRIOR FILING DATE: 1999-04-19
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Human
US-09-690-921-1

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 15

US-09-301-829A-1
; Sequence 1, Application US/0301829A
; Patent No. 6558670
; GENERAL INFORMATION:
; APPLICANT: Friede, Martin
; APPLICANT: Hermand, Philippe
; TITLE OF INVENTION: VACCINES
; FILE REFERENCE: B45181
; CURRENT APPLICATION NUMBER: US/09/301,829A
; CURRENT FILING DATE: 1999-04-29
; PRIOR APPLICATION NUMBER: GB9908885.8
; PRIOR FILING DATE: 1999-04-19
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Immunostimulatory oligonucleotide sequence comprising
; OTHER INFORMATION: one or more CpG motifs
US-09-301-829A-1

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 16

US-09-692-170C-42
; Sequence 42, Application US/09692170C
; Patent No. 6562345
; GENERAL INFORMATION:
; APPLICANT: Diamond, Don J.
; TITLE OF INVENTION: IMMUNO-REACTIVE PEPTIDE CTL EPITOPES OF HUMAN CYTOMEGALOVIRUS
; FILE REFERENCE: 1954-346
; CURRENT APPLICATION NUMBER: US/09/692,170C
; CURRENT FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: US 09/534,639
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 09/075,257
; PRIOR FILING DATE: 1998-05-11
; PRIOR APPLICATION NUMBER: US 09/021,298
; PRIOR FILING DATE: 1998-02-10
; PRIOR APPLICATION NUMBER: US 08/950,064
; PRIOR FILING DATE: 1997-10-14
; PRIOR APPLICATION NUMBER: US 08/747,488
; PRIOR FILING DATE: 1996-11-12
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic DNA adjuvant
US-09-692-170C-42

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 17

US-09-337-619-10
; Sequence 10, Application US/09337619
; Patent No. 6653292
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Methods of Treating Cancer Using
; FILE REFERENCE: C1039/7021/HCL
; CURRENT APPLICATION NUMBER: US/09/337,619
; CURRENT FILING DATE: 1999-06-21
; EARLIER APPLICATION NUMBER: US 08/960,774
; EARLIER FILING DATE: 1997-10-30
; EARLIER APPLICATION NUMBER: US 08/738,652
; EARLIER FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-337-619-10

Tue Jan 3 10:58:22 2006

```
Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
   |||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 18
US-10-405-231A-42
; Sequence 42, Application US/10405231A
; Patent No. 6726910
; GENERAL INFORMATION:
; APPLICANT: Diamond, Don J.
; TITLE OF INVENTION: IMMUNO-REACTIVE PEPTIDE CTL EPITOPES OF HUMAN CYTOMEGALOVIRUS
; FILE REFERENCE: 1954-346
; CURRENT APPLICATION NUMBER: US/10/405,231A
; PRIOR FILING DATE: 2003-04-03
; PRIOR APPLICATION NUMBER: US/09/692,170C
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: US 09/534,639
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 09/075,257
; PRIOR FILING DATE: 1998-05-11
; PRIOR APPLICATION NUMBER: US 09/021,298
; PRIOR FILING DATE: 1998-02-10
; PRIOR APPLICATION NUMBER: US 08/950,064
; PRIOR FILING DATE: 1997-10-14
; PRIOR APPLICATION NUMBER: US 08/747,488
; PRIOR FILING DATE: 1996-11-12
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic DNA adjuvant
US-10-405-231A-42

Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
   |||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 19
US-10-238-607-42
; Sequence 42, Application US/10238607
; Patent No. 6727093
; GENERAL INFORMATION:
; APPLICANT: Diamond, Don J.
; TITLE OF INVENTION: HCMV- REACTIVE T CELLS AND USES THEREFOR
; FILE REFERENCE: 1954-398
; CURRENT APPLICATION NUMBER: US/10/238,607
; PRIOR FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 09/692,170
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: US 09/534,639
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 09/075,257
; PRIOR FILING DATE: 1998-05-11
; PRIOR APPLICATION NUMBER: US 09/021,298
; PRIOR FILING DATE: 1998-02-10
; PRIOR APPLICATION NUMBER: US 08/950,064
; PRIOR FILING DATE: 1997-10-14
; PRIOR APPLICATION NUMBER: US 08/747,488
; PRIOR FILING DATE: 1996-11-12
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic DNA adjuvant
US-10-405-231A-42

Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
   |||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 20
US-09-984-365-42
; Sequence 42, Application US/09984365
; Patent No. 6733973
; GENERAL INFORMATION:
; APPLICANT: Diamond, Don J.
; TITLE OF INVENTION: IMMUNO-REACTIVE PEPTIDE CTL EPITOPES OF HUMAN CYTOMEGALOVIRUS
; FILE REFERENCE: 1954-384
; CURRENT APPLICATION NUMBER: US/09/984,365
; PRIOR FILING DATE: 2002-03-13
; PRIOR APPLICATION NUMBER: US 09/692170
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: US 09/534639
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 09/075257
; PRIOR FILING DATE: 1998-05-11
; PRIOR APPLICATION NUMBER: US 09/021298
; PRIOR FILING DATE: 1998-02-10
; PRIOR APPLICATION NUMBER: US 08/950064
; PRIOR FILING DATE: 1997-10-14
; PRIOR APPLICATION NUMBER: US 08/747488
; PRIOR FILING DATE: 1996-11-12
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: DNA adjuvant containing CpG sequences
US-09-984-365-42

Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
   |||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 21
US-09-565-906-1
; Sequence 1, Application US/09565906
; Patent No. 6737066
; GENERAL INFORMATION:
; APPLICANT: Moss, Ronald B.
; TITLE OF INVENTION: HIV Immunogenic Compositions and Methods
; FILE REFERENCE: P-IM 4029
; CURRENT APPLICATION NUMBER: US/09/565,906
; CURRENT FILING DATE: 2000-05-05
; PRIOR APPLICATION NUMBER: US 60/132,762
; PRIOR FILING DATE: 1999-05-06
; PRIOR APPLICATION NUMBER: US 60/150,667
```

```
; PRIOR FILING DATE: 1999-08-25
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: phosphorothioate-modified synthetic
; OTHER INFORMATION: oligodeoxynucleotide
US-09-565-906-1

Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
   |||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 22
US-09-257-188A-2
; Sequence 2, Application US/09257188A
; Patent No. 6797276
; GENERAL INFORMATION:
; APPLICANT: Glenn, Gregory M.
; APPLICANT: Alving, Carl R.
; TITLE OF INVENTION: Use of Penetration Enhancers and Barrier Disruption Agents to
; FILE REFERENCE: 4057-32
; CURRENT APPLICATION NUMBER: US/09/257,188A
; CURRENT FILING DATE: 1999-02-25
; PRIOR APPLICATION NUMBER: US 08/749,164
; PRIOR FILING DATE: 1996-11-14
; PRIOR APPLICATION NUMBER: US 08/896,085
; PRIOR FILING DATE: 1997-07-17
; PRIOR APPLICATION NUMBER: PCT/US97/21324
; PRIOR FILING DATE: 1997-11-14
; PRIOR APPLICATION NUMBER: US 60/075,850
; PRIOR FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: US 60/075,856
; PRIOR FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: US 60/086,251
; PRIOR FILING DATE: 1998-05-21
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-257-188A-2

Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
   |||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 23
US-09-965-101-51
; Sequence 51, Application US/09965101
; Patent No. 6821957
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schorr, Joachim
; APPLICANT: Wu, Tong
```

```
; TITLE OF INVENTION: Vectors and Methods for Immunization or
; TITLE OF INVENTION: Therapeutic Protocols
; FILE REFERENCE: C1039/7057 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/965,101
; CURRENT FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: US 09/082,649
; PRIOR FILING DATE: 1998-05-20
; PRIOR APPLICATION NUMBER: US 60/047,233
; PRIOR FILING DATE: 1997-05-20
; PRIOR APPLICATION NUMBER: US 60/047,209
; PRIOR FILING DATE: 1997-05-20
; NUMBER OF SEQ ID NOS: 84
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 51
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: Has a phosphorothioate backbone.
US-09-965-101-51

Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
   |||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 24
US-09-965-101-56
; Sequence 56, Application US/09965101
; Patent No. 6821957
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schorr, Joachim
; APPLICANT: Wu, Tong
; TITLE OF INVENTION: Vectors and Methods for Immunization or
; TITLE OF INVENTION: Therapeutic Protocols
; FILE REFERENCE: C1039/7057 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/965,101
; CURRENT FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: US 09/082,649
; PRIOR FILING DATE: 1998-05-20
; PRIOR APPLICATION NUMBER: US 60/047,233
; PRIOR FILING DATE: 1997-05-20
; PRIOR APPLICATION NUMBER: US 60/047,209
; PRIOR FILING DATE: 1997-05-20
; NUMBER OF SEQ ID NOS: 84
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 56
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: Has phosphodiester backbone.
US-09-965-101-56

Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
   |||||
Db 1 TCCATGACGTTCTCTGACGTT 20
```

```
RESULT 25
US-09-965-101-58
; Sequence 58, Application US/09965101
; Patent No. 6821957
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Krieger, Arthur M.
; APPLICANT: Schorr, Joachim
; APPLICANT: Wu, Tong
; TITLE OF INVENTION: Vectors and Methods for Immunization or
; FILE OF INVENTION: Therapeutic Protocols
; FILE REFERENCE: C1039/7057 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/965,101
; CURRENT FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: US 09/082,649
; PRIOR FILING DATE: 1998-05-20
; PRIOR APPLICATION NUMBER: US 60/047,233
; PRIOR FILING DATE: 1997-05-20
; PRIOR APPLICATION NUMBER: US 60/047,209
; PRIOR FILING DATE: 1997-05-20
; NUMBER OF SEQ ID NOS: 84
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 58
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (0)..(0)
; OTHER INFORMATION: Backbone is phosphorothioate--phosphodiester
; OTHER INFORMATION: chimera
US-09-965-101-58

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 26
US-10-697-055-42
; Sequence 42, Application US/10697055
; Patent No. 6843992
; GENERAL INFORMATION:
; APPLICANT: Diamond, Don J.
; TITLE OF INVENTION: HCMV- REACTIVE T CELLS AND USES THEREFOR
; FILE REFERENCE: 1954-398
; CURRENT APPLICATION NUMBER: US/10/697,055
; CURRENT FILING DATE: 2003-10-31
; PRIOR APPLICATION NUMBER: US/10/238,607
; PRIOR FILING DATE: 2002-12-09
; PRIOR APPLICATION NUMBER: US 09/692,170
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: US 09/534,639
; PRIOR FILING DATE: 2000-03-27
; PRIOR APPLICATION NUMBER: US 09/075,257
; PRIOR FILING DATE: 1998-05-11
; PRIOR APPLICATION NUMBER: US 09/021,298
; PRIOR FILING DATE: 1998-02-10
; PRIOR APPLICATION NUMBER: US 08/950,064
; PRIOR FILING DATE: 1997-10-14
; PRIOR APPLICATION NUMBER: US 08/747,488
; PRIOR FILING DATE: 1996-11-12
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 42
; LENGTH: 20

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 27
US-10-651-013-14
; Sequence 14, Application US/10651013
; Patent No. 6924135
; GENERAL INFORMATION:
; APPLICANT: ZEON CORPORATION
; TITLE OF INVENTION: No. 6924135el DNA encoding Eimeria glycerolaldehyde-3-phosphate
; FILE OF INVENTION: dehydrogenase and uses thereof
; FILE REFERENCE: GAPDH gene of Eimeria
; CURRENT APPLICATION NUMBER: US/10/651,013
; CURRENT FILING DATE: 2003-08-29
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 14
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: Oligonucleotide
US-10-651-013-14

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 28
US-09-917-222B-1
; Sequence 1, Application US/09917222B
; Patent No. 6938261
; GENERAL INFORMATION:
; APPLICANT: Granoff, Dan
; APPLICANT: Moe, Gregory R.
; TITLE OF INVENTION: VACCINES FOR BROAD SPECTRUM PROTECTION
; FILE OF INVENTION: AGAINST DISEASES CAUSED BY NEISSERIA MENINGITIDIS
; FILE REFERENCE: CHOR001
; CURRENT APPLICATION NUMBER: US/09/917,222B
; CURRENT FILING DATE: 2001-06-27
; PRIOR APPLICATION NUMBER: US 60/221,495
; PRIOR FILING DATE: 2000-07-27
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: CpG nucleotides
US-09-917-222B-1

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```


Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCCTGACGTT 20
| | | | | | | | | | | | | | | | | |
Db 1 TCCATGACGTTCCCTGACGTT 20

Search completed: December 30, 2005, 18:56:48
Job time : 98 secs

Qy 1 TCCATGACGTTCCCTGACGTT 20
| | | | | | | | | | | | | | | | | |
Db 1 TCCATGACGTTCCCTGACGTT 20

RESULT 29

US-09-954-987B-83
; Sequence 83, Application US/09954987B
; Patent No. 6943240
; GENERAL INFORMATION:
; APPLICANT: Stefan Bauer
; APPLICANT: Grayson B. Lipford
; APPLICANT: Hermann Wagner
; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
; FILE OF INVENTION: CPG-BASED IMMUNO-AGONIST/ANTAGONIST
; FILE REFERENCE: C1041/7016 (AWS)
; CURRENT APPLICATION NUMBER: US/09/954,987B
; CURRENT FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US 60/233,035
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: US 60/263,657
; PRIOR FILING DATE: 2001-01-23
; PRIOR APPLICATION NUMBER: US 60/291,726
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 60/300,210
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 83
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-83

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCCTGACGTT 20
| | | | | | | | | | | | | | | | | |
Db 1 TCCATGACGTTCCCTGACGTT 20

RESULT 30

US-09-672-126B-83
; Sequence 83, Application US/09672126B
; Patent No. 6949520
; GENERAL INFORMATION:
; APPLICANT: Hartmann, Gunther
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Krieg, Arthur
; TITLE OF INVENTION: Methods Related to Immunostimulatory
; FILE OF INVENTION: Nucleic Acid-Induced Interferon
; FILE REFERENCE: C1039/7044
; CURRENT APPLICATION NUMBER: US/09/672,126B
; CURRENT FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: 60/156,147
; PRIOR FILING DATE: 1999-09-29
; NUMBER OF SEQ ID NOS: 169
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 83
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-672-126B-83

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: December 30, 2005, 18:49:36 ; Search time 494 Seconds

(without alignments)

334.793 Million cell updates/sec

Title: US-09-914-454B-1

Perfect score: 20

Sequence: 1 tccatgacgttctgacgtt 20

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 9793542 seqs, 4134689005 residues

Total number of hits satisfying chosen parameters: 19587084

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA Main:

1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US11_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	20	100.0	20	3	US-09-760-506-3
2	20	100.0	20	3	US-09-768-012-3
3	20	100.0	20	3	US-09-824-468-100
4	20	100.0	20	3	US-09-824-468-105
5	20	100.0	20	3	US-09-949-194-1
6	20	100.0	20	3	US-09-917-222-1
7	20	100.0	20	3	US-09-800-266A-86
8	20	100.0	20	3	US-09-800-266A-90
9	20	100.0	20	3	US-09-895-007A-86
10	20	100.0	20	3	US-09-895-007A-90
11	20	100.0	20	3	US-09-920-313-86
12	20	100.0	20	3	US-09-920-313-90
13	20	100.0	20	3	US-09-888-326-560
14	20	100.0	20	3	US-09-888-326-561
15	20	100.0	20	3	US-09-888-326-562
16	20	100.0	20	3	US-09-888-326-563
17	20	100.0	20	3	US-09-818-918-10
18	20	100.0	20	3	US-09-931-583-47
19	20	100.0	20	3	US-09-776-479-69
20	20	100.0	20	3	US-09-776-479-137
21	20	100.0	20	3	US-09-776-479-152
22	20	100.0	20	3	US-09-776-479-153
23	20	100.0	20	3	US-09-776-479-223

ALIGNMENTS

RESULT 1

US-09-760-506-3
; Sequence 3, Application US/09760506
; Publication No. US20010034330A1
; GENERAL INFORMATION:
; APPLICANT: Kensil, Charlotte
; TITLE OF INVENTION: Innate Immunity-Stimulating Compositions of CpG and
; FILE REFERENCE: 8449-153-999
; CURRENT APPLICATION NUMBER: US/09/760,506
; CURRENT FILING DATE: 2002-01-12
; PRIOR FILING DATE: 2000-05-01
; PRIOR APPLICATION NUMBER: 60/200,853
; PRIOR FILING DATE: 2000-01-13
; PRIOR APPLICATION NUMBER: 60/175,840
; PRIOR FILING DATE: 1999-04-08
; PRIOR APPLICATION NUMBER: 60/128,608
; PRIOR FILING DATE: 1998-08-10
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Motif
US-09-760-506-3

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 2

US-09-768-012-3
; Sequence 3, Application US/09768012
; Patent No. US2001004416A1
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: McCluskie, Michael J.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for

Sequence 302, App
Sequence 948, App
Sequence 949, App
Sequence 950, App
Sequence 951, App
Sequence 952, App
Sequence 953, App
Sequence 954, App
Sequence 955, App
Sequence 956, App
Sequence 957, App
Sequence 958, App
Sequence 1023, App
Sequence 83, Appl
Sequence 1, Appl
Sequence 42, Appl
Sequence 69, Appl
Sequence 137, App
Sequence 152, App
Sequence 153, App
Sequence 223, App
Sequence 302, App

Tue Jan 3 10:58:23 2006

; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; FILE REFERENCE: C1040/7010/HCL/MAT
; CURRENT APPLICATION NUMBER: US/09/768,012
; CURRENT FILING DATE: 2001-01-22
; PRIOR APPLICATION NUMBER: US 60/177,461
; PRIOR FILING DATE: 2000-01-20
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (8)...(8)
; OTHER INFORMATION: Cytosine is unmethylated.
; NAME/KEY: modified_base
; LOCATION: (17)...(17)
; OTHER INFORMATION: Cytosine is unmethylated.
US-09-768-012-3

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 3
US-09-824-468-100
; Sequence 100, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieger, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 100
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-100

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 4
US-09-824-468-105
; Sequence 105, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieger, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the

; TITLE OF INVENTION: Inducing a Th2 Immune Response
; FILE REFERENCE: C1040/7010/HCL/MAT
; CURRENT APPLICATION NUMBER: US/09/768,012
; CURRENT FILING DATE: 2001-01-22
; PRIOR APPLICATION NUMBER: US 60/177,461
; PRIOR FILING DATE: 2000-01-20
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (8)...(8)
; OTHER INFORMATION: Cytosine is unmethylated.
; NAME/KEY: modified_base
; LOCATION: (17)...(17)
; OTHER INFORMATION: Cytosine is unmethylated.
US-09-768-012-3

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 3
US-09-824-468-100
; Sequence 100, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieger, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 100
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-100

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 4
US-09-824-468-105
; Sequence 105, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieger, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the

```
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: CpG nucleotides
US-09-917-222-1

Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 7
US-09-800-266A-86
; Sequence 86, Application US/09800266A
; Patent No. US2002015603A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
; Cancer Medicament Combination Therapy for the Treatment of
; TITLE OF INVENTION: Cancer
; FILE REFERENCE: C1037/7017 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/800,266A
; CURRENT FILING DATE: 2001-03-05
; PRIOR APPLICATION NUMBER: US 60/187,214
; PRIOR FILING DATE: 2000-03-03
; NUMBER OF SEQ ID NOS: 146
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 86
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-86

Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 8
US-09-800-266A-90
; Sequence 90, Application US/09800266A
; Patent No. US2002015603A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
; Cancer Medicament Combination Therapy for the Treatment of
; TITLE OF INVENTION: Cancer
; FILE REFERENCE: C1037/7017 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/800,266A
; CURRENT FILING DATE: 2001-03-05
; PRIOR APPLICATION NUMBER: US 60/187,214
; PRIOR FILING DATE: 2000-03-03
; NUMBER OF SEQ ID NOS: 146
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 90
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-800-266A-90

Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 9
US-09-895-007A-86
; Sequence 86, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
; APPLICANT: Schetter, Christian
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
; TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
; FILE REFERENCE: C1041/7014 (AMS)
; CURRENT APPLICATION NUMBER: US/09/895,007A
; CURRENT FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: US 60/214,368
; PRIOR FILING DATE: 2000-06-28
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 86
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-86

Query Match      100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 10
US-09-895-007A-90
; Sequence 90, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
; APPLICANT: Schetter, Christian
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
; TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
; FILE REFERENCE: C1041/7014 (AMS)
; CURRENT APPLICATION NUMBER: US/09/895,007A
; CURRENT FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: US 60/214,368
; PRIOR FILING DATE: 2000-06-28
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 90
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-90
```

us-09-914-454b-1.rnpbm

Tue Jan 3 10:58:23 2006

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 11

US-09-920-313-86
; Sequence 86, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Nucleic Acids for the Prevention and
; TITLE OF INVENTION: Treatment of Gastric Ulcers
; FILE REFERENCE: C1037/7019 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/920,313
; CURRENT FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: US 60/222,248
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 86
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-920-313-86

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 12

US-09-920-313-90
; Sequence 90, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Nucleic Acids for the Prevention and
; TITLE OF INVENTION: Treatment of Gastric Ulcers
; FILE REFERENCE: C1037/7019 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/920,313
; CURRENT FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: US 60/222,248
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 90
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-920-313-90

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 13
US-09-888-326-560
; Sequence 560, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 560
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc feature
; LOCATION: (0)-(0)
; OTHER INFORMATION: phosphorothioate backbone
US-09-888-326-560

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 14

US-09-888-326-561
; Sequence 561, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 561
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-888-326-561

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 15

US-09-888-326-562

; Sequence 562, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 562
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: chimeric phosphorothioate/phosphodiester backbone
; OTHER INFORMATION: with phosphorothioate at 5' and 3' ends
US-09-888-326-562

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 16

US-09-888-326-563
; Sequence 563, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 563
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphodiester backbone
US-09-888-326-563

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 17

US-09-818-918-10

; Sequence 10, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/09/818,918
; CURRENT FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-10

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 18

US-09-931-583-47
; Sequence 47, Application US/09931583
; Publication No. US20030050263A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred
; TITLE OF INVENTION: Methods and Products for Treating HIV Infection
; FILE REFERENCE: C1039/7053 (HCL)
; CURRENT APPLICATION NUMBER: US/09/931,583
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 09/415,142
; PRIOR FILING DATE: 1999-10-09
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 47
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-931-583-47

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 19

us-09-914-454b-1.rnpbm

Tue Jan 3 10:58:23 2006

```

US-09-776-479-69
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 69
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-69

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 20
US-09-776-479-137
; Sequence 137, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 137
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-137

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 21
US-09-776-479-152
; Sequence 152, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-152

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 22
US-09-776-479-153
; Sequence 153, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 153
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-153

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 23
US-09-776-479-223
; Sequence 223, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 223
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-223

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
Db 1 TCCATGACGTTCTCTGACGTT 20

```


; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 223
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-223

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 24

US-09-776-479-302
; Sequence 302, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 302
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-302

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 25

US-09-776-479-948
; Sequence 948, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093

; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 948
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-948

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 26

US-09-776-479-949
; Sequence 949, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 949
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-949

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20
|||
Db 1 TCCATGACGTTCTCTGACGTT 20

RESULT 27

US-09-776-479-950
; Sequence 950, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 950
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence

us-09-914-454b-1.rnpbm

Tue Jan 3 10:58:23 2006

Best Local Similarity 100.0%; Pred. No. 5.6; Mismatches 0; Indels 0; Gaps 0;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20

DB 1 TCCATGACGTTCTCTGACGTT 20

RESULT 30

US-09-776-479-953

; Sequence 953, Application US/09776479

; Publication No. US20030087848A1

; GENERAL INFORMATION:

; APPLICANT: Bratzler, Robert L.

; APPLICANT: Petersen, Deanna M.

; APPLICANT: Fouron, Yves

; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the

; FILE REFERENCE: C1037/7013 (HCL/MAT)

; CURRENT APPLICATION NUMBER: US/09/776,479

; CURRENT FILING DATE: 2001-02-02

; PRIOR FILING DATE: 2000-02-03

; NUMBER OF SEQ ID NOS: 1093

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 953

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic Sequence

US-09-776-479-951

Query Match 100.0%; Score 20; DB 3; Length 20;

Best Local Similarity 100.0%; Pred. No. 5.6; Mismatches 0; Indels 0; Gaps 0;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20

DB 1 TCCATGACGTTCTCTGACGTT 20

Search completed: December 30, 2005, 20:15:11

Job time : 495 secs

; FEATURE:

; OTHER INFORMATION: Synthetic Sequence

US-09-776-479-950

Query Match 100.0%; Score 20; DB 3; Length 20;

Best Local Similarity 100.0%; Pred. No. 5.6; Mismatches 0; Indels 0; Gaps 0;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20

DB 1 TCCATGACGTTCTCTGACGTT 20

RESULT 28

US-09-776-479-951

; Sequence 951, Application US/09776479

; Publication No. US20030087848A1

; GENERAL INFORMATION:

; APPLICANT: Bratzler, Robert L.

; APPLICANT: Petersen, Deanna M.

; APPLICANT: Fouron, Yves

; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the

; FILE REFERENCE: C1037/7013 (HCL/MAT)

; CURRENT APPLICATION NUMBER: US/09/776,479

; CURRENT FILING DATE: 2001-02-02

; PRIOR FILING DATE: 2000-02-03

; NUMBER OF SEQ ID NOS: 1093

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 951

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic Sequence

US-09-776-479-951

Query Match 100.0%; Score 20; DB 3; Length 20;

Best Local Similarity 100.0%; Pred. No. 5.6; Mismatches 0; Indels 0; Gaps 0;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCATGACGTTCTCTGACGTT 20

DB 1 TCCATGACGTTCTCTGACGTT 20

RESULT 29

US-09-776-479-952

; Sequence 952, Application US/09776479

; Publication No. US20030087848A1

; GENERAL INFORMATION:

; APPLICANT: Bratzler, Robert L.

; APPLICANT: Petersen, Deanna M.

; APPLICANT: Fouron, Yves

; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the

; FILE REFERENCE: C1037/7013 (HCL/MAT)

; CURRENT APPLICATION NUMBER: US/09/776,479

; CURRENT FILING DATE: 2001-02-02

; PRIOR FILING DATE: 2000-02-03

; NUMBER OF SEQ ID NOS: 1093

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 952

; LENGTH: 20

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic Sequence

US-09-776-479-952

Query Match 100.0%; Score 20; DB 3; Length 20;